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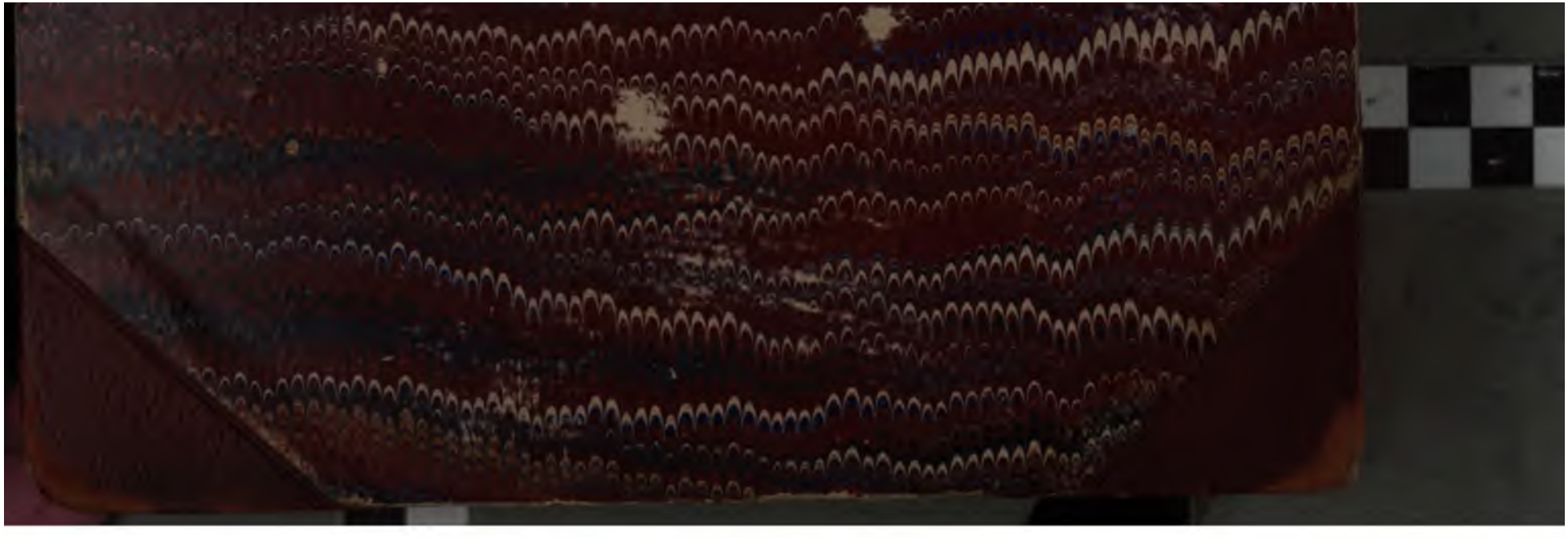

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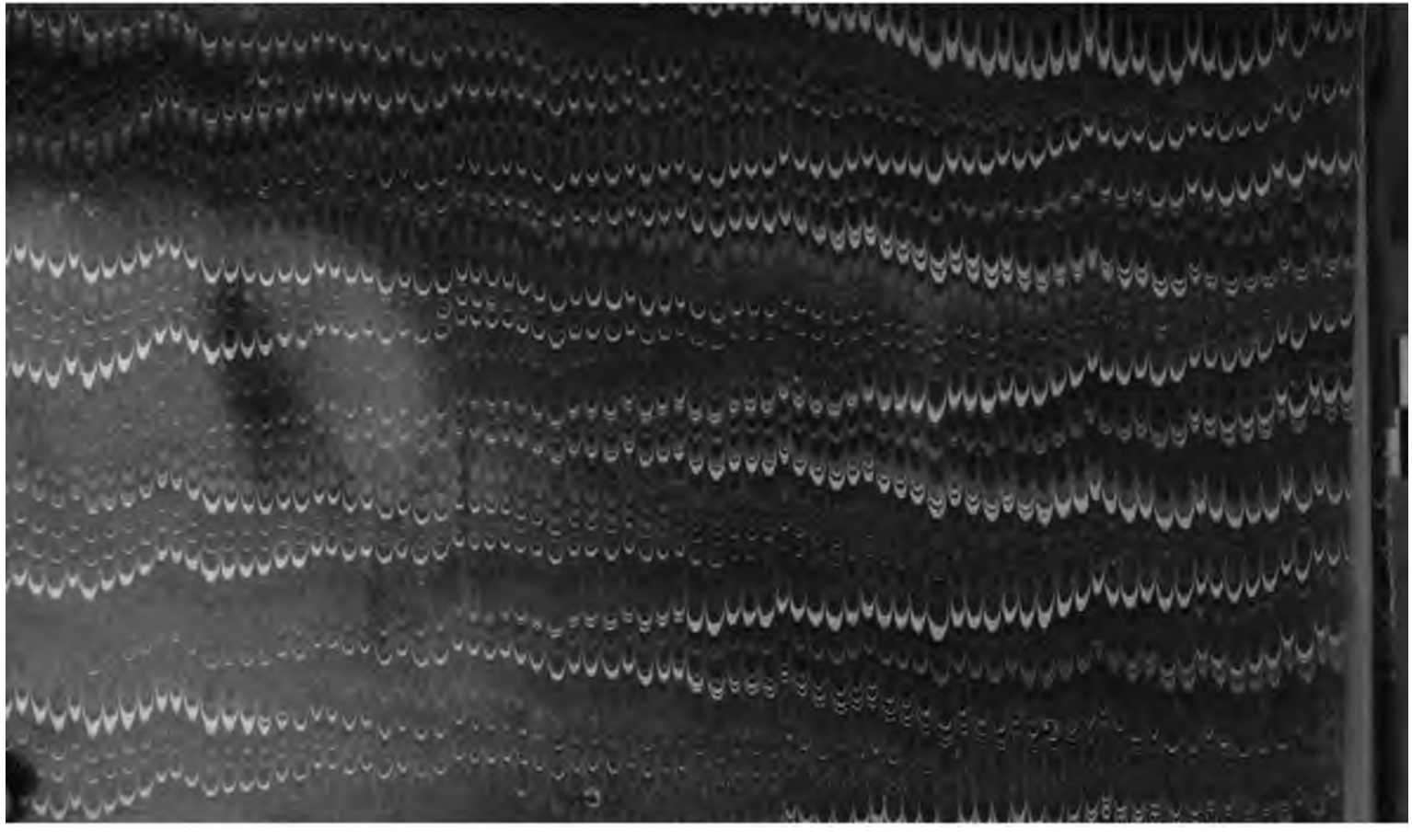

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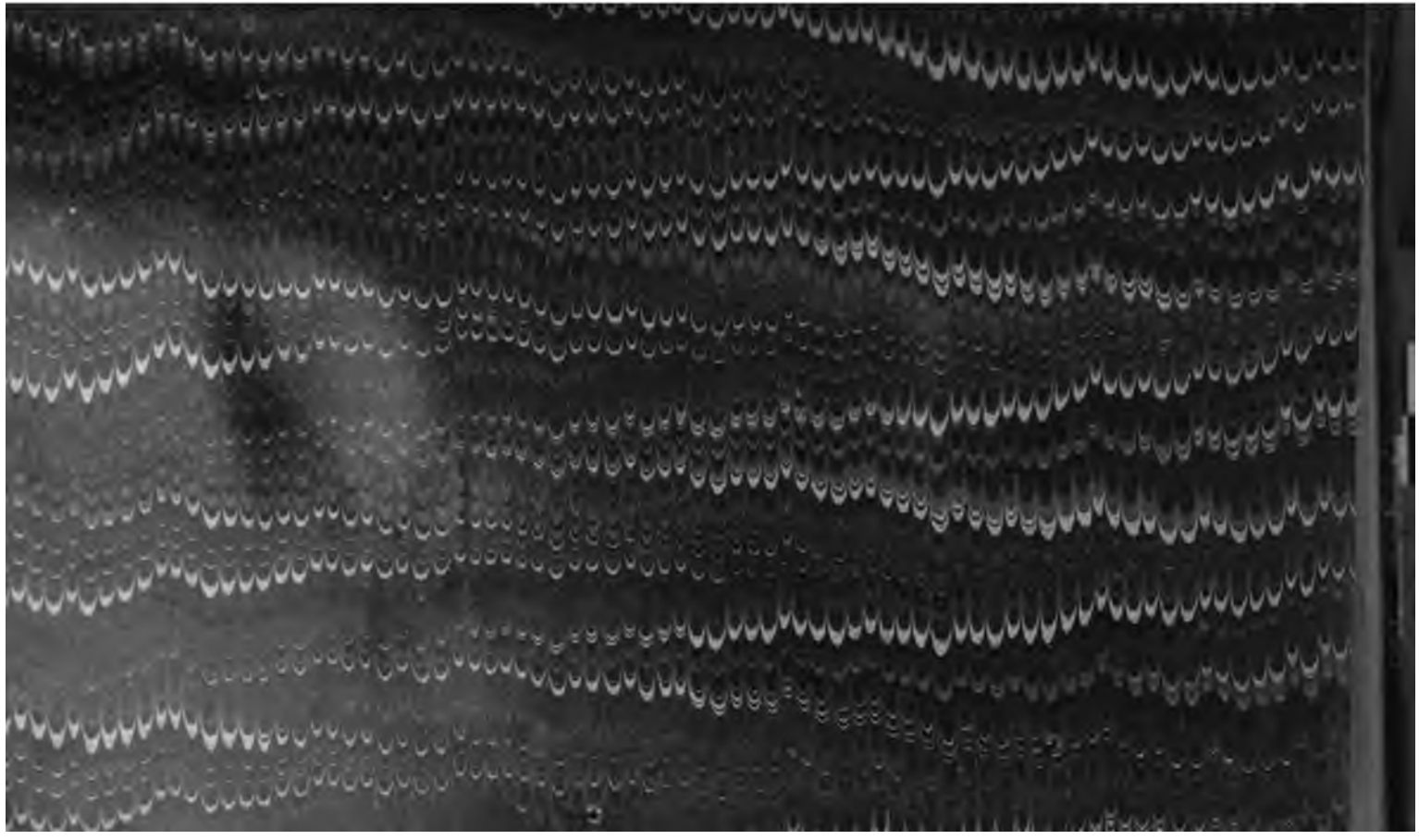

UP THE YANG-TSE.

BY E. H. PARKER.

(REPRINTED FROM THE 'CHINA REVIEW.')

WITH SKETCH MAPS.

HONGKONG.
PRINTED AT THE 'CHINA MAIL' OFFICE.

1891.

Ch 215.55

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ERRATA.

Page	2,	Line	6,	for	*It is was,*	read	*This was.*
,,	84,	,,	9,	,,	*boilers has,*	,,	*boilers have.*
,,	94,	,,	29,	,,	*caul of pipe,*	,,	*caul of pigs.*
,,	117,	,,	13,	,,	*of sandwich men,*	,,	*sandwich men.*
,,	154,	,,	9,	,,	*no passing,*	,,	*now passing.*
,,	154,	,,	36,	,,	*magpipes,*	,,	*magpies.*
,,	196,	,,	35,	,,	*loats its,*	,,	*loses its.*
,,	208,	,,	6,	,,	*though,*	,,	*through.*
,,	216,	,,	6,	,,	*noticed,*	,,	*notice.*

Yang-tse, Yang-tze, Yang-tzu should be *Yang-tze* throughout.

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CONTENTS.

Page.

THE YANG-TSE GORGES AND RAPIDS IN HU-PEI 1

THE RAPIDS OF THE UPPER YANG-TSE 20

The 'Vade-mecum' of the Traveller through the Gorges of the Great River 27

Special Observations 49

A JOURNEY IN NORTH SZ CH'UAN, ... 52

NAN-CH'UAN AND THE KUNG-T'AN RIVER 113

UP THE KIA-LING RIVER 174

THE GREAT SALT WELLS 204

NORTH KWEI CHOU 246

THE WILDS OF HU-PEH 275

SZ CH'UAN PLANTS 301

INDEX 1

PREFACE.

In publishing this reprint, I have expunged useless matter to the best of my ability, and I venture to call attention to the Index, which has been compiled with care.

E. H. PARKER.

1891.

UP THE YANG-TSE.

I.

THE YANG-TSE GORGES AND RAPIDS IN HU-PEI.

At daybreak on the morning of the 24th of November, 1880, we rolled over uncomfortably in our beds as the noisy crew made preparations to start from I-ch'ang. Having had the advantage of reading Blakiston's, Gill's, Rocher's and others' experiences with Sz-ch'uan boat-crews, we had taken the precaution of arranging to sleep on board, and to have everything ready to start on the evening of the 23rd, thinking that, with this prevision, we might at least count upon leaving some time, not later than midnight the next day. This hope was, however, the less sanguine in that the skipper had applied on the 21st for permission to substitute 'noon' on the 24th for 'early dawn,' as had been distinctly stipulated in the contract. The necessity of drawing up a written contract has been touched upon by more than one traveller upon this route; and, in endorsing their recommendations, we may add, specifically, that no particular form of contract appears to have been sanctioned by custom; and, generally, that, in this as in all matters in China, the European *voyageur* may rest assured that, in every question which concerns his own comfort or interests, his own wits will pull him through better than any established native practice. In the present instance one distinct proviso was that we should start at daybreak on the 24th; another that ten *per cent.* of the total boat-hire should be dependent in any case on the hirer's favour, and be certainly forfeited unless all the

[illegible] destination. Half the hire was to be [illegible] more after arrival at the Kwei Kwan [illegible] including the optional portion, [illegible] have arrived at Chung-king. In [illegible] furniture, baggage, and servants. [illegible] and somewhat to our surprise, [illegible] the forward deck. We were [illegible] incredulous) when the [illegible] request of pork and [illegible] upon our not delaying [illegible] to start before day- [illegible] as far as we were concerned. [illegible] with this understand- [illegible]

[illegible] between I-chang [illegible] and is disposed [illegible] thirty feet long by [illegible] of the crew [illegible] resting upon [illegible] and upon [illegible] wise and [illegible] with- [illegible] the pas- [illegible] forward deck [illegible] movable [illegible] the [illegible] which the [illegible] is the [illegible] and [illegible] and for every [illegible] about down with [illegible] ings, [illegible] Three [illegible]

four times during the voyage, also, they get a ration of pork and fowl, a treat known as *shau shén fu* or 'roast to the gods,' which is moreover repeated as an extra encouragement to them from time to time at the expense of the skipper or the passenger, when they have succeeded in passing a dangerous rapid, or achieved any other exceptional success. About six feet from the prow is rigged athwart-ships a powerful beam; and connected with this by means of strong ropes is the main sweep, which extends thirty feet or so ahead, and, worked by three or four men, has a powerful effect in veering the boat round in any particular direction. A similar beam is rigged athwart-ships in front of the mast, and in support of the mast, which runs up in front of the foremost passenger compartment. Side sweeps, worked by eight men apiece, move on short stanchions attached to this latter beam.

Behind the mast are the passenger cabins, each about ten or twelve feet square, by eight high, with the exception of the fourth or hindmost, which is not so deep fore and aft as the other three. The foremost we use as a sitting, dining, and guest room; the second as a bedroom; and the other two as store and servants' rooms: when carpetted or covered with sheepskin rugs, these compartments can be made very tolerably comfortable. Beneath them are the bulkheads, in which the traveller's baggage is packed, each compartment being separate, and as far watertight as any Chinese-made compartment can be. Behind is a sort of after deck, which can be covered in with mats like the forward deck, and which, besides being what may be called the tiller-room, can also be used for passengers' cooking, servants' promenade, and general miscellaneous purposes. Sloping up again behind this is the poop, a mysterious region, protected by doors, in which the skipper and his harem dwell. The sail is the usual ragged affair, with bamboos in place of reefs, and the mast-head serves besides to bear the strain of the tracking rope, being relieved, however, by a second line passed round two cat-heads fixed perpendicularly in front of the second thwart-beam. The tracking is usually done with the *fei-tan*, or 'flying hawser,' a bamboo affair of two strands: the next-sized hawser is called the *êrh-hsing-tan*, or 'second-go hawser;' and the largest, only used at the most dangerous rapids, the *tso-tan*, or 'sitting hawser.' From a book published by Rear-Admiral *Ho*

Chin-shên,* called the *Hsing Ch'uan Pi Yau*, or the 'Sz Ch'uan Traveller's *Vade Mecum*,' we have gathered a number of valuable local terms which we shall give in the narrative. At I-ch'ang we exchanged visits with his Excellency the Admiral, and found him a personage of great frankness, and anxious to do all in his power to oblige. We are indebted to him amongst other things for a *hung ch'uan*, or 'red-boat,' a handy little *sampan* manned by a naval lieutenant and five stalwart braves, which follows or precedes us alternately all the way, and makes itself generally useful, whether in assisting trackers to disengage their line, in carrying them to and from the shore, or in rendering small services to ourselves, whom it is commissioned to protect and to escort as far as Wu-shan on the frontiers of Sz Ch'uan. The dilatory deputy who was sent down by the Sz Ch'uan authorities to assist our boat up to Ch'ung-k'ing has not put in an appearance yet: he himself, together with his reasons, will doubtless turn up some time or other, when it is to his advantage to be to the front.

CHAPTER II.

After tossing uneasily, alternately too hot and too cold, in a superfluity of blankets, I rose to see how far so much yelling and straining had brought us, thinking that we must at least have arrived at the mouth of the Ich'ang gorge, which is only three miles from the city. I found, however, that two hours vigorous *yuloing* with the two side sweeps had only brought us half a mile along the left-hand bank; another half hour's drifting and pulling took us to the other side, near the river-otter† fisheries, little more than opposite the Consulate, whence we had started to the firing of guns three hours before. The crew, (in which term in future we shall include the permanent staff of eight, and the twenty-three hired trackers), were now regaled with their first meal. The cook on these occasions has the bowls, basins,

* He has since changed his adoptive surname of *Ho* for his real surname of *Lo*.

† The livers of these animals have since been prescribed as a certain cure for the malady of Prince Ch'un, the Emperor's father.

and chopsticks all ready: every man helps himself with a wooden dipper to a fill of rice from the tub; each four or five share the contents of a basin of tasty soup, bean-curd, cabbage, wooden-looking peas, or other strange compound; fish-like mouths place themselves in position at the bowl edges; a steady shovelling with the chopsticks goes on; chewing is eschewed; and all is over. Previous to entering the gorge, passed a temple called *Kwan-yin Miau*, and a place called *Tsz-yang*, both on the right bank, and rounded a nasty-looking corner where the water rushed past some angry low-lying rocks in threatening fashion. On the left bank at the entrance of the gorge is the village or boat-station of *Nan-chin*, a place duly identified on the sketch-map of Admiral Ho. The first aspect of this gorge, of which we had heard and read so much, was somewhat disappointing. The scenery was undoubtedly fine, and, to my thinking, resembled the best parts of the Rhine or the barely second-rate Norwegian fiords more than anything else. So far Switzerland was not to be mentioned, even in a whisper. The day's journey was accomplished almost entirely by laborious tracking, during which the regulation amount of agility, howling, and other unnecessary display was got through by the crew. We had one or two opportunities of taking a walk amongst the rocks, and at four o'clock came to anchor, or rather made fast with hawsers fore and aft to the bank, at a spot between *P'ing-shan Pa* and *Shih P'ai*, just above the mid-gorge Customs Station at which Blakiston appears to have anchored. In no place, thus far, did the current seem to be particularly strong. Owing to the method of progression employed, the Chinese junks which ascend the gorges and rapids submit themselves to all the dangers which exist. Hugging the banks, they have to sheer out at each projecting rock, where, of course, they must encounter the brunt of the current, and where, if rapid or shallow there be, it is most probable they will find it. The rock passed, they are swept along in the eddy which intervenes between this and the next jutting rock, and, whilst thus drifting clumsily along, every favourable position for the bow places the stern at a corresponding disadvantage; and *vice versa*. One man, armed with a flexible bamboo pole, is frequently all that stands between a rock and apparent annihilation. A light draft, full-powered steamer, such

as [illegible] the Lower Yang-tsze [illegible] banks; and, where [illegible] the banks, would [illegible] apparatus, always [illegible] and [illegible] our steamer [illegible] certain [illegible] encountered so far.

There [illegible] morning [illegible] south-west—and [illegible] changed [illegible]—wind. I went [illegible] severe climbing [illegible] 300 feet above the river. [illegible] and gave me the names [illegible] trees were growing [illegible] terraced [illegible] tree is used as [illegible] when mixed with lime [illegible] the hard cement [illegible] those at [illegible] the steamer started [illegible] two miles along the [illegible] we got on board [illegible] possible tracking [illegible] an hour we made as much progress as we had made the whole previous day. [illegible] we emerged in the afternoon from the gorge proper [illegible] where begins a [illegible] desert somewhat resembling the [illegible] island opposite [illegible] after a sand-bath, spread out along the Suez Canal. [illegible] this and the next day the sand raised by the wind almost [illegible] the surrounding scenery from our view, and gave [illegible] appearance of being immersed in a fog. We passed [illegible] *Hung Shih*, or 'Red Rock,' and *Chin-ming* [illegible] 'Rescue Rock,' and after a little more tracking anchored or moored at a small village called *Lai-pri Shih*, or

'Thunder-clap Rock.' All the places above mentioned appear in the route-map called the *Hsia-chiang Chiu-shêng T'u-chih*, or *Sketch of Life Saving on the Yang-tsze Rapids and Gorges.* When, as frequently happens, the tow-line gets foul of the rocks, the trackers are stopped by a tattoo of three strokes at a time on the drum. This is called *ta k'uan*, or 'beating easy,' a term also applied, according to Admiral Ho's book, to the quick tattoo by which on other occasions the men are encouraged to redouble their efforts. *Fu-tsz* is the term applied to the trackers, whether permanent, or hired and additional, (*t'ien fu-tsz*). The half-dozen or so of sailors who remain always on board the boat to handle the sail, pay out the line, beat the drum, and so on, are termed *hsia shou*, or 'hands:' the two masters or mates *chia-chang*, or 'managers.' Owing to the jumble of dialects spoken on the frontiers of Hu Peh and Sz Ch'uan, it is difficult to be sure of the exact meaning of these terms. Even the erudite Admiral, who occasionally quotes the poet *Tu* to illustrate the dangers of the route, sometimes uses characters which are manifestly wrong; whilst the illiterate boatmen and military escort officers are still less to be depended upon. We anchored at 3 30 p.m., after a not very hard day's work, on the afternoon of the 25th, and took advantage of the remaining daylight to ramble over the hills and inspect the country homesteads. The dialect of the people differs here very slightly from that of Hankow; but the upper even tone, which is so high and so distinctly a monotone at that place, shews a tendency higher up to 'curl upwards' at the end, after the style of the still transitional Hakka *shang p'ing*. There seems some reason to believe that the Hakkas of Canton Province are the descendants of emigrants from Sz Ch'uan, Hu Pei, and Kiang Si. Probably, if this be so, the confusion caused by the madcap vagaries of *Chang Hsien-tsung* in Sz Ch'uan, and the imperial butcheries which followed, both at the close of the seventeenth century, would sufficiently account for this wholesale immigration into the southern province. The houses that I entered were much better built than those which one encounters on the lower banks of the Great River. The reason probably is that there is high ground on the upper river, where it is possible to build without fear of inundation. When I walked from Kewkiang to Hankow in the winter of 1872, I noticed that

the dwellings improved greatly as soon as ever I got beyond the reach of the summer overflows of the Yang-tsze.

CHAPTER III.

An hour or so after starting on the morning of the 26th of November, we passed two minor rapids called the *Siau Lu-chio* and the *Tu Lu-chio*, or the 'Little' and 'Great Deer's Horns.' The native sketch-map states that these places are only very dangerous in summer and autumn, and doubtless the 'strong rapid in June' of Blakiston's larger chart refers to this spot. The two rapids are separated from each other by only a few hundred yards. Our own score or so of trackers pulled us successfully through with the middle-sized hawser. We reached *Shan-tou-p'ing*, or Hill Lozenge Plain—the *Shan-tow-pien* of Blakiston—at noon, and received the usual complimentary cards and salutes from the gunboats and red-boats at the station. In addition to the red-boat which accompanies us to the Sz Ch'uan frontier, other boats of the same description escort us along their beats, varying from 30 to 50 *li*, (ten to sixteen miles). The marines and officers so far have all been Hu Nan men. Admiral Ho boasted with pardonable pride of the exceptionally large share taken by his co-provincials in both the civil and the military government of China. We went on shore after tiffin and walked for a couple of miles along the sandy and rocky bank, many of the boulders upon which were worn deep with the friction of innumerable bamboo hawsers. These ropes will endure a much greater pulling strain than any hempen article of the same calibre, but they are not so limber, and consequently will not coil so quickly and so small, nor will they stand a sudden cross-strain half so well. A hempen hawser could never hold out against the severe friction of the granite rocks, and would probably rot with the rapid changes of temperature and with wet, whereas the water strengthens the bamboo fabric. These latter are renewed at least after each voyage down and up. At 3 p.m. we reached the rapid of *T'a Tung*, or Otter's Cave,—the Kwa-dung of Blakiston. This rapid does not appear to be more than a furlong in length, but it was the most serious business we had as yet encountered, and we watched with keen interest from the shore our ricketty looking craft as she was slowly dragged through the seething waters. At

this place we took on thirty extra trackers, and requisitioned the big hawser, about four inches in circumference. At least two hundred yards of rope were paid out, and the trackers were out of both sight and hearing of those on board the boat. But a couple of men are always ready at a moment's notice to throw off their clothes, spring into the water, and free the tow-line from any obstacle in which it may catch. Men, too, are posted on prominent boulders at distances from each other, to signal orders from the boat, and likewise to keep the hawser free. Another hour's tracking and sailing and drifting in eddies, brought us to *Mei-jên T'o*, or 'Beauty's Eddy,' after sailing through which we arrived at *Chü-ch'i*, 'Crooked Creek,' or 'Lane Creek,' (variously written), and *Hê Yen* or *Hê Yai-tsz*, both meaning 'Black Rock.' All the above places are given in the Admiral's Itinerary, and also in the Route Map above alluded to. And here I may state that I use no names of places unless they are approved by the boatmen themselves. The Admiral's Itinerary gives the name of every single place passed by the traveller on both north and south banks, and contains at least a dozen others in each of the intervals between every couple of names given by me. At *Hê Yen* we noticed five white hay-cock looking mounds on the hill (left bank) which we were informed marked the *t'ang* or 'stage.' We had, it was said, achieved two great *t'ang*, or 180 *li* from Ich'ang, the first great 'stage' being *Hwang-ling Miau*. Shortly after starting on the morning of the 27th, we came to the entrance of the *Niu-kan*, ('Cow's Liver,' the *Lu-kan* of Blakiston), or *Ma Fei* ('Horse's Lungs') Gorge. This place is also known as the *K'ung Ling Hsia*, a term of doubtful etymology, by some of the boatmen unmistakably pronounced *T'ung Ling*. Captain Gill selects this word as an instance of the difficulty of obtaining the exact pronunciation of Chinese places, and points out how his companion, Mr. Baber, arrived at *Liu Lin* or 'Willow Grove.' In this case, however, the words *T'ung* and *K'ung* are both used, though the latter is the only one given in the two native books so often here cited, whilst *Liu Lin* is another place at the entrance to the gorge. A rather far-fetched derivation given by the author of the Sketch Map is *K'ung* 'empty,' and *Ling*, an obscure character referring to some part of a boat, 'because the boats have to empty themselves of

their cargoes occasionally.' I succeeded in taking a very fair sketch of the entrance just before passing the three consecutive rocks in mid-stream called the *T'ou*, *Erh*, and *San Chu*, or 'First, Second, and Third Pearls.' The morning was still somewhat misty, or it may have been dusty, yet not so much so as to seriously mar the prospect, which was finer than anything even in the latter part of the Ich'ang Gorge, and almost equal to a first-rate fiord in Norway: perhaps on a par with Lake Thun, barring the snow-capped mountains in the distance, which are so striking an ornament of Swiss scenery. We were exceedingly fortunate in having a favourable breeze all the way up the Cow's Liver, a gorge which takes its name from an overhanging mass which is supposed to, and indeed does, resemble somewhat the hepatic organ of that ruminant. A solitary tree of considerable size, perched on the summit of one of the hills on the left bank, and marked in the native Route Map, was also easily identified. Above the Cow's Liver Gorge are the three *Ch'ing T'an*, or 'Clear Rapids,' (also called by some the *Hsin T'an*, or 'New Rapids.') At certain times of the year,—the spring and late winter,—these rapids are perhaps the most formidable on the Upper Yang-tsze. We were told, notwithstanding, that we should find the *Yeh T'an*, on the other side of Kwei-chou, much more dangerous. There are three rapids at this place, known as Nos. 1, 2, and 3, counting from up-river. We got out and walked whilst our boat was being towed up numbers three and two, and passed on the way a junk lying bottom-upwards upon the bank, where she was undergoing repairs: her cargo of cotton was being dried on the beach. No. 3 rapid is about a quarter of a mile long, the worst part not taking up, perhaps, more than one third this distance. At least two hundred yards of tow-line were paid out, and the operation safely accomplished with the assistance of about 50 extra coolies. No. 2 rapid gave very little trouble. We then got into the boat, and closely scanned the hazardous business of passing rapid No. 1, a terrible sloping race of not more than 20 or 30 yards in length. The boat was moored close to the shore, at the shore-edge of the rapid, and actually touching it. Two middle-sized hawsers, each about 150 yards long, were laid out amongst the stones, and the bow of the ship was steadied by the strongest hawser, made fast to a rock, and

lying at right angles to the course the junk was to follow. Angry rocks peeping through the foaming and roaring rapid were within a foot of her prow as, with a few pulls of the bow-sweep, she was sheered into the literally up-hill torrent. As soon as the two towing hawsers were taut, the steadying rope was let go and hauled in: the waters hissed and roared around the boat; her head plunged; everything creaked and groaned; and the bamboo lines slipped and snapped round their fastenings as she slowly, very slowly, crawled along. Just as we had cleared the worst part, and were at the 'top' of the current, we nearly came to utter grief, for we had passed a junk at anchor lying in shore between our two lines, the hindmost of which the shore people could not or would not let loose, and which the skipper was loth to cut, although the mates and cook were shrieking for a meat-knife, which was fortunately not at hand. I did not quite see how we got safely out of the scrape, but as the two hawsers were neutralizing each other's efforts by pulling in different ways, I expected to see the boat go darting down every moment. Happily the thinner of the two lines held out until the offending second one was eased, and we glided into slack water to a salute of three guns vouchsafed by some obsequious official. In recognition of their efforts, I presented 1000 cash to the extra hirelings, and 1000 more to our own crew. In the evening the man who had taken the money from my hand came to enquire if it was all intended for him, or to be divided. The squabbling over this division was so protracted and noisy that I half vowed to give no more presents at all. I forgot to mention that, in the Cow's Liver Gorge, we passed the dead body of a man floating down stream, over which a kite was hovering. The only notice our crew took of it was to say, 'he has his small hose on.' The whole of the three Clear Rapids passed by us were on the left or north side of the river. There seemed to be rapids on the other side too, besides more than one fierce current between,—that is, crossing over from bank to bank. Between each of the three left-bank rapids,—that is, sailing upwards or downwards,—the current for a hundred yards or more is so slack that ferry-boats cross straight over with the aid of a single *lu* or side sweep. I have no technical information by which I can form a competent opinion whether or no a steamer could make her way up at this time of the

year,—which, as already stated, is not the worst,—or what the rate of the current is, now, or at other times. Judging from its appearance as contrasted with the strongest summer currents off Kew-kiang and Chin-kiang, I should say that, if those were seven knots, this would be nine or ten; if five, this seven; and so on, *mutatis mutandis*. Whether a steamer with nothing but steam power, and drawing four or five feet of water, could, with her increased resistance to the current as compared with a junk, make her way up is for mariners to decide; but, anyhow, she could be towed up with 200 or 300 men, and she could have either steel hawsers or bamboo hawsers made stronger than those used by the Chinese, besides having steam to ease the strain on the lines, and to give her way. Her steam power would at all events be sufficient to work her into an eddy, or into slack water, should she by any chance break loose. The break-force spar used in the bows by Sz Ch'uan boatmen might be worth the attention of European river captains. One of these lies along each of the sides of the ship's bows, a little in advance of her prow, like a couple of carelessly rigged bowsprits, and is loosely held in a rope loop. The inward end rests on the cross-beam, the ends of which form two cat-heads above the gunwales, about six feet from the prow. When the boat runs ashore, or on to rocks, the forward end is, or the ends are, lowered into the sand or stones: the shock naturally forces the other ends up, but a man is at hand to pull them down; and, to give him purchase, a loose loop of rope is left swinging at the inner ends too. We had to use both these spars later on this afternoon, and one was snapped in two; but they undoubtedly saved us from serious damage, if not from shipwreck.

CHAPTER IV.

We were in luck again after clearing the *Ts'ing* or *Hsin T'an*, and were carried before a stiff breeze right through the *Mi-ts'ang* or 'Rice Granary' Gorge—the *Mi-tan* of Blakiston. This gorge is quite as fine as, if not finer than, the Cow's Liver, and is certainly more precipitous. Perhaps the most striking view of it is from the upper end, looking down into it: there it resembles a funnel leading into a bottomless cavern of gloom. Emerging from the Rice

Granary, we were sailing hopefully past the *Hwang Niu San kun*, or 'Yellow Cow Three Seethings,' with the *Chü-ch'ih Chi*, or 'Saw Teeth Shallows,' on our left, (that is on the right bank), when I noticed a junk ahead suddenly drop astern, and at the same time drift sideways to the other side of the river. She then as suddenly shot ahead, and drifted sideways back again. Assisted by her sail, she had evidently manœuvred to avail herself of an eddy, and we appeared to be about to follow suit. But we failed to catch the eddy, and had to work our sweeps. What happened next I failed to see, as I had turned my back for an instant; but, as soon as I looked up, I saw we had once more crossed to the left bank and were going in a slanting direction downwards, bow first! Then we whisked round and drifted upwards in an eddy, fetching up as above described on the rocks, and saving ourselves from disaster only by a deft manipulation of the break-force spars. The result was we lost at least an hour of time, and had to track up what looked very like a mediocre rapid,—apparently the Yellow Cow again. We had also to round three or four nasty corners, and watch a very exciting series of juggles with eddies and strong currents. At last we passed a jutting rock on the left bank, called *Hsia-shih Mên*, or 'Lower Stone Pass,' and anchored within sight of Lau Kwei Chou, or Old Kwei Town, which lay on the opposite or South Bank, twenty river *li* from Kwei Chou proper. (By the way, Kwei Chou should not be confused with K'wei-chou (Fu), or K'wei Kwan, higher up the river). There was a little snow this evening as we took our clamber over the hills, and we felt very sorry for the wretchedly-clad trackers as they huddled together on the cold planks, many with but a shirt and poorly-wadded jacket over a ragged pair of cotton trowsers. I recommend all travellers taking this route in autumn, winter, or spring, to prefer skins to stoves. Skin-lined stockings, pyjamas, hat, coat, dressing gown, and ulster, with skins on the floor and hung round the room, will keep off more cold than any stove, besides not suffocating one with a stuffy atmosphere. Fifty dollars' worth of sheep-skin and fine lambskin will achieve all this.

The whole of the next day, Sunday, the 28th of November, was employed in laboriously tracking past half-a-dozen corners, the two first on the left bank within sight of Old Kwei Chou, and

[illegible] exactly opposite Kwei Chou [illegible] Kun-[illegible] Chio—which may [illegible] Captain Gill mentions that [illegible]), we moored almost [illegible] much larger than a [illegible] by the usual crenellated [illegible] nearly all the Chinese city-[illegible] I have hitherto seen, in a [illegible] running round all the [illegible] to be generally hon-[illegible] they were quite as diffi-[illegible] on the 26th; and, [illegible] to be tracked up, cost us [illegible] from the water-lines, and [illegible] sixty or seventy feet at [illegible] and the boatmen [illegible] An intending navigator [illegible] a winter between Ich'ang [illegible] the position of the rocks [illegible] there are summer pas-[illegible] If the position [illegible] with proper bear-[illegible] of the exposed [illegible] must necessarily [illegible] possible to run stea-[illegible] in the year. For [illegible] it would be absolutely [illegible] of the unexposed [illegible] we passed another wreck opposite Kwei Chou, [illegible] a cargo-boat floating down had been wrecked, with a loss of [illegible] lives. Possibly the dead body we passed on the [illegible] was one of the unfortunate drowned. One of the currents we passed through on the left bank is marked on the native Route Map as [illegible] or the 'Whirlpool of [illegible] Yuan,' [illegible] the celebrated author of the *Li Sao* Poem. Those on the right bank are marked as *Lien Hua San Hwan*, or 'Three Lotus Flower Whirlpools,' but I did not succeed in inducing anyone to volunteer these names, which,

however, are probably well authenticated. We hear thrilling accounts of the dreaded *Yeh T'an*, which we are to pass to-morrow, and learn with disgust that 200 junks are waiting to be towed up; and all before our turn comes. In passing Pulley Rock, we had at least a quarter of a mile of hawser out. I see no reason why a steamer should not have half a dozen hawsers, each worked with a capstan on board, or a rough windlass fixed on the bank. In the narrower rapids like the *T'a Tung*, she would be able to make use of both banks, or of rocks on both sides, for that purpose. One of her greatest difficulties would be anchoring or mooring at night; for there is, I believe, no practicable bottom to be found in many parts of the gorges, whereas, outside the gorges, the bottom is often rocky and unsuitable. But, so far as I could make out, there is no consecutive mile of gorge thus far without a footing; and, wherever there is a footing, the boatmen seem to have no difficulty in making fast a hawser. I learn to-day from the Captain in charge of our red-boat that Admiral Ho is in supreme command of thirty gunboats and thirty red-boats, the former with ten men apiece, and the latter with five, exclusive of the *shau kwan*, or squad officer—sometimes a junior captain, at others a lieutenant or ensign, (for the same terms are used for both army and navy). A higher officer in general command of ten red-boats is called a *ling shau*, or commanding squad-officer, a sort of petty commodore. The men have the characters *shui chün*, or 'marines,' marked in red on a white circle in the centre of both back and breast of their velvet-trimmed and neat-looking blue jackets, with their names in full, and their numbers in smaller characters; and also the words 'intended to save life only, not to rescue cargo,' *chuan chiu ming, pu chiu hwo*. Their head-dress is a black turban, and their other clothes much like those of other respectably-dressed Chinese. They receive from taels three to taels four a month, and one new uniform a year, the cost of which is deducted from their wages. I never saw more handy, smart-looking and docile marines in any country. At night they cover their neat-looking *sampan* with a sort of blue and white striped tent: one of the five serves as cook in turn: they make their beds on board; and look thoroughly well fed, healthy, and happy. Admiral Ho seems to be a very popular official, and to take a great interest in his duties. Opposite Kwei

. . . is a . . . or gratuitous burial ground, which he has . . . for the use of those unfortunate bodies which may be . . . the river. I had two long conversations with him, and . . . have said, the frankest and most communicative . . . had ever met. I hope his permanent . . . Upper Yang-tsze. He has rather a curious . . . which means "in a . . . empty," or . . . differently. "Blue book . . ." would . . . current English.

CHAPTER V.

. . . put in an appearance, after an absence of . . . afternoon, shone brightly on our efforts as . . . the 29th, and approached the Lin-Lai . . . Temple," which stands out from the . . . from the gruesome Yeh T'an. We . . . as marked on Blakiston's chart, on both . . . the afternoon, met men carrying . . . slung on to the back, and sup- . . . which obviates the neces- . . . the back. The coal is made up in . . . had been mixed with water, . . . can. Any steamer which . . . would thus be able to coal . . . The price of coal, from . . . between 200 and 250 cash . . . ascertain the exact market . . . alone when rushing . . . as a traveller. Ap- . . . Rapid," (Esich T'an in . . . moored in at least six . . . waiting for their . . . to certain privileges . . . with the help of our re- . . . we succeeded in round- . . . of a small rapid, . . . waiting imme-

diately at the rapid to be towed up. Downward-bound junks were shooting the torrent in great numbers; wrecks were lying about on all sides; and a junk was just being towed up with four strong hawsers attached to four gangs of forty or fifty men apiece. Strange to say, this rapid is not mentioned by either Blakiston or Gill, though we were informed on all sides that it was our only serious one. It is formed by a sloping bed of boulders, stones, and large shingle, running far out from the left bank into the bend of the river. At this time the rapid on the right bank, which did not look nearly so formidable, was available for, and was being used by smaller junks. The main current in the middle of the two ragged-looking rapids swept down like a huge wedge. Just below the rapid was a large rock, standing about thirty feet out of the water, and not quite in the current. It was stated by everyone that there was no danger so long as the several lines by which junks are towed were kept equally strained, and the junk's broadside not allowed to catch the downrush of water. A marine to whom I was talking said that nothing drawing more than five feet of water could get up at this time; but there would, I apprehend, be sufficient water in the central channel if a steamer could only make way against it. Here, as at most of the rapids, she would be able to make use of both banks to throw out guys and other steadying apparatus. Coming down would be a more dangerous business, but (with deference to mariners, for I am entirely ignorant in such matters), I do not see why steamers should not drift down backwards in the most dangerous places, and, where necessary, counteract the overbearing force of the current by steaming upwards. The Chinese, with their clumsy junks and miserable apparatus, can go both up and down with comparative safety, and, however positive the opinion of some may be that it would be madness for a steamer to ascend the gorges and rapids, I cannot see why, if a steamer accepts the single condition of drawing no more water than a Sz Ch'uan cargo junk, she should not, with all her other advantages, accomplish what a junk does. There are at least two master mariners on the river who are anxious to be given the chance of trying it, and there is certainly no lack of Chinese sailors willing to risk their lives if any European capitalist will only have

the pluck to try, and, if he fails, to go on trying until he succeeds.

We broke three successive hawsers in the ticklish job of stealing a march on the unwilling crowds of junks below the *Yeh T'an*. In one case our safety hung on a shaky looking iron staple loosely fixed into one board of a junk's stern. Once we whirled round as the current caught us just when our line snapped in rounding a junk; but we were fortunately able to sheer into the eddy we had previously left. The operation was so exciting that we could hardly eat our breakfast, but kept rushing to table for a mouthful of food, and then bolting to the door to watch eagerly our next move. The Chinese boatmen seem to blunder into danger with as much easy-going stupidity as they wriggle out of it with calm though noisy (if the two can be combined) resource. The trumpery old sail, and the provoking old sweeps, the sockets in which are perpetually slipping off their pins, and require a man to wax them with the sole of a cast-off straw-shoe, seem to work wonders at most distressing crises. Knots are carelessly tied; pipes are lit when the hand should be otherwise employed; cooking utensils are always in the way; blocks wabble about, and are so loosely fixed that ropes are almost invited to tear themselves; and yet everything seems to blunder somehow round again to safety. These Sz Ch'uan boatmen certainly do a good day's work for their money. This year they are getting from three to five *tiau* (strings almost equal to a dollar), for the trip to Ch'ung-k'ing, with liberal food provided by the ship. Down, they are generally willing to come for the food alone; and the journey is only one-fifth the duration of that upwards. This year the hire of coolies has gone up, it is said, from one to four *tiau*, owing partly to the plentiful harvests in Sz Ch'uan, and partly to the fact of large numbers having gone north to guard the Russian frontier. I had consequently to pay Tls. 200 for a second-class boat which should have cost not more than 80 *tiau*,—say Tls. 60.

Arrived at the Yeh T'an, our escorting officials, (the Sz Ch'uan one had caught me up here), said that they proposed to spend the afternoon in looking after the ropes, and to start up the rapid next day. I therefore took a soldier with me as guide, and went for a walk as far as *Liu-Shu Wan*, or 'Willow Reach,' on

the left bank, where I regaled myself and the soldier with peanuts and tea. As he was well educated, I took the opportunity of getting his 'four tones' out of him, and found that, in his part of Hu Nan, the tones were more like those of Hankow than those of our red-boat commander, also a Hu Nan man, whose tones were almost the same as the Hakkas. Returning from my walk at about three o'clock in the afternoon, I saw that our boat had somehow or other wriggled herself in front of the other junks, and was about to ascend the rapid. As we were lightly laden, we only required two hawsers with about 40 men to each. The ascent of three feet was perfectly clear from the hill-top, whence I anxiously watched the struggle which decided the fate of nearly all the worldly things I possessed. I consoled myself with the reflection that, if everything were lost, I should at least be the happy possessor of nothing, which is a free and easy attitude to take up against society generally. After about ten minutes, however, I perceived that I must relapse once more into the cares of possession, and down I went to congratulate and receive the congratulations of the deputy and naval officers. The deputy's small boat ascended next, but he watched its approach with serene indifference, as he had all his property on his back.

The six *ksia-shou*, or *t'ai-kung*, ('hands'), were presented with 600 cash wine money; the three red-boats with 500 cash apiece; and the head ruffian of the Rapid coolies with one *tiao*. A bottle of lavender-water was the reward of the lieutenant whose manœuvres had got us past the other junks: I celebrated the occasion with my first shave and wash for a week; reflected that next to scrupulous cleanliness the greatest comfort was unscrupulous dirt; and proceeded to pen these lines. We passed the same evening the *Mang-shê Chai*, or 'Boa-constrictor Enclosure' on the North, and the *Hsiung-Hwang Shan*, or 'Bezoar Hill,' on the south bank, and moored a little further on the *Shang Shih-mên* or 'Upper Stone Pass.' At half-past eight on the morning of the 30th we cleared the *Pa-tou*, or 'Eight Bushel' Rapid, without disaster, and learnt that the rapid of *Niu K'ou* or 'Cow's Mouth' was the only other one of importance on this side of K'wei Kwan. Here I shall drop my narrative for the

present, in the hope that it may be of some small service to those who may venture to ascend the rapids and gorges as far as the Sz Ch'uan frontier, now but a few miles off.

THE RAPIDS OF THE UPPER YANGTSZE.

Amid so much that has been written by European travellers upon the Yang-tsze Rapids, it may perhaps be well not to disdain consideration of what the native pilot has to say on the subject. The opinions and traditions of the local junk-masters have been carefully collated by Admiral Ho Chin-shên, (whose cognomen is Hu-ch'ên), now charged with the general superintendence of the gunboats and life-boats between Ich'ang and Wu-shan on the Sze Ch'uan frontier. It appears from the two prefaces to his work, written by the Viceroys Li Han-chang and Ting Pao-chêng, that both these high functionaries have been deeply impressed by the dangers of the Yang-tsze gorges and rapids. Witness is borne by them to the fact, which has been disputed in certain quarters, that the villagers at the Ch'ing or Hsin T'an Rapid were in the habit of purposely obstructing the river, in order to reap a harvest, whether as pilots or coolies, from the disasters befalling merchant-junks at that place. Commodore (now Rear-Admiral) Ho was accordingly charged with the duty of organizing a life-boat service, to support which the Viceroy Ting* (whilst still Governor of Shan Tung) contributed the handsome sum of Tls. 5,000, raised by his own efforts. Admiral Ho, whom I visited at I-ch'ang, had himself made frequent voyages between Ch'ung-k'ing and I-ch'ang, and graphically describes, in a preface to a subordinate part of the published Itinerary, the horrors of the route, which 'the force of 10,000 oxen' can scarcely soften. He gives the name of every single place, whether on the north or the south bank, between the two cities; about one thousand in all. He adds observations upon the current, the promontories, the submerged rocks, &c., &c.; whilst in an illustrated volume pictures are given which are supposed to represent the worst places, and additional cautions are

* Since deceased.

furnished for the benefit of the traveller. I give an almost literal translation of the Itinerary, (*Hsing Ch'uan Pi Yao*, or '*Vade mecum* to Sz Ch'uan'), as far as K'wei-chou Fu, together with free translations of the supplementary observations accompanying the sketches. Owing to the illiterate state of the mariners, and the unnautical habit of the literates with whom I have been in contact on my way up, it has been impossible in many cases to arrive at a certain conclusion as to what some of the terms do actually mean;—such, for instance, as 'keep the point open,' 'take up the current,' 'cap the hill,' and so on. The mariners do not understand the book terms, and the literary men do not understand the colloquial nautical terms: moreover, different dialects are spoken by each; and all these differ more or less from any dialect I know. Such is the language of China. I have done my best, however, to furnish anyone, acquainted or not with the Chinese language, who may do the world the service to survey the gorges and rapids, with a basis on which to work. By knowing the names and sites of the local rocks and eddies, he will be able to appreciate more readily the remarks of the junkmen and pilots, whose services of course he must requisition. Admiral Ho appears to have bestowed the utmost care upon the Itinerary, which appears to me to be absolutely correct throughout. The transliteration of the Chinese characters has been effected according to Sir Thomas Wade's system, very slightly modified, for reasons which it is unnecessary to discuss here. The riverine dialects, which will be examined in their proper place, are, roughly speaking, Pekingese, with the Hankow tones. The names of places, however, are so well known, locally, that the feeblest attempt at pronunciation will be at once identified. If a steamer once succeeds in reaching K'wei-chou Fu, surveyors need not trouble themselves much with the rocks, eddies, and rapids higher up. All the steamer has to do is to go ahead, and let the Itinerary take care of itself. Yet, if the accompanying wearisome translations be found of any appreciable service, I shall have great pleasure in continuing them as far as Ch'ung-king. Notice is taken of Blakiston's names wherever they appear on his larger chart. Surveyors will be interested, too, perhaps, in comparing the Chinese observations with those in Blakiston's and Gill's narratives.

The dangers of the rapids, it will be seen from the native remarks, are (1) sunken rocks; (2) eddies; (3) shallows over which flows a rapid current; (4) too great draught of water; (5) insufficiently strong lines; (6) unmanageable helms, by reason of whirlpools; (7) entanglement of the line; (8) want of local knowledge. The dangers of the gorges seem to consist in (1) whirlpools; (2) eddies; and (3) rapid currents; all of which subject the ship to two dangers: (A) running upon rocks or shallows; (B) running against the rocky bank. A steamer ascending the rapids and only drawing five feet of water (the draught of a loaded cargo junk) would be no more exposed to Nos. 1, 2, 3, 4, and 7 than a junk. As to No. 5, there is no limit to the number of hawsers she might use; and, in addition, she could supplement their power with steam, improve the quality of tracking hawsers, and command, by reason of her superior capital, larger numbers of coolies. Only needing to use her hawsers at the rapids, she would keep them (if occasionally wetted when made of bamboo) in better condition. As to No. 6, a steamer under present conditions would probably be worse off than a junk, unless provided with a powerful stern-sweep. I do not see why a powerful stern-sweep should not be added to the rudder, nor why a forward rudder should not be added to a bow-sweep. Some boats, 30 feet in length, have stern-sweeps of 50 to 60 feet, of which 30 or 40 project over the stern, the inner end being balanced with stones. It is important that nothing project beyond the keel or bottom, as lines have continually to be passed under boats and junks, and would have to be passed under steamers; otherwise the steamer must either be delayed, or must break adrift the obstructing junk. Sail power would be of little use to a steamer going up; of none whatever coming down: (downward junks invariably unship their masts). At any rate, in order to facilitate the working of lines and crosslines, a mast which would unship would be preferable, as also a smoke-stack which would move up and down like those of the Thames ferry-steamers. A steamer should be provided with a series of strong protecting beams round or above the water line, and carry a liberal supply of rope buffers: she should also have, at both bow and stern, poles such as those used by the Chinese, to break the force of her bumping or ground-

ing. The Chinese junks are also provided with a pole at the bows running through a tube in the junk's bottom, which may be used either as a break or as an anchor. In short, before building steamers specially for this service, study should be made of native passenger and cargo boats. Coal can be had all the way from Ichang for one or two cash the catty,—say $2 to $3 a ton. As to mooring, it will be seen that the Itinerary points out the most eligible places at all stages of the water.

I will conclude this paper with a list of nautical phrases used on the river, some taken from Admiral Ho's book, and others from the mouths of the boatmen themselves. Communication with pilots and junk-masters will be the more easy, the better means there are for making them understand exactly what you mean in technical matters.

1. Passenger-boat. K'wa-tsz Ch'uan.
2. Large high-sterned cargo-boat. Ma-ch'io Wei.
3. Ch'ung-k'ing lighter. Wu-pan. (Double-mast).
4. Bow-sweep. Shao, or Ch'ien-shao.
5. Side-sweeps. Lu.
6. Oars. Jao.
7. Move the bow-sweep. Yai-shao.
8. Work the side-sweeps. Yao-lu.
9. Heave or throw. Shwai.
10. Haul. Ch'e, or ch'ê, or t'o, or t'wa.
11. Upward breeze. Shang fêng.
12. Downward breeze. Hsia fêng.
13. Fog. Chao-tsz.
14. Mast. Wei-kan.
15. Rudder. To.
16. Port your helm. Hsüan (or shou); *i.e.* English usage.
17. Starboard your helm. Pan (or k'ai); *i.e.* English usage.
18. Galley. Tsao-ts'ang.
19. Master. (Ta) Lao-pan.
20. Mate. Lao-pan; (usually a relative).
21. Deck-hands. T'ai-kung.
22. Trackers. Fu-tsz.
23. After-cabin, (skipper's). Shao-tsz.
24. State-rooms, (four). T'ou, êrh, san, and sz, kwan-ts'ang.

25. Tiller-room. Chio-wo, or Wo-kung.
26. To break away. Ta-chang.
27. Make taut or extend. Chang.
28. Loosen. Fang.
29. Long sounding-bamboo at bow. Wu-hao.
30. Other shorter sounding and pushing poles. Kao-tsz.
31. Bamboo hooked-pole for holding fast. Chao-kan-tsz.
32. Highest water. Man-chia-shui, or Ta-shui.
33. Mid-water. Nan-ts'ao, or Chung-shui.
34. Mid-water, (full and lower). Ta and Hsiao (added).
35. Run before wind. Ta-fêng.
36. To be caught by sudden jibe of wind. Yen-fêng.
37. To beat the drum thrice to call a halt.
38. To beat the drum rapidly to encourage. } Ta k'wan.
39. To rest. Hsieh-hsieh.
40. Stop for tiffin. Hsieh shao.
41. Life-boat. Hung-ch'uan.
42. To leave shore-end of rope, and fasten yourself on again behind for want of space. Tsou pieh.
43. A guard or check rope. Tou-chi.
44. To make fast by way of guard. Tou.
45. No. 1 Tow-line. Tso-t'an.
46. No. 2 ,, Erh-hsing-t'an.
47. No. 3 ,, Fa'rh-t'an,
48. No. 4 ,, Fei-t'an, or Fei-fe'rh, } almost alike.
49. No. 5 Line. Yün-t'an.
50. Hawser. Lan.
51. Coir rope. Tsung-soh.
52. Hemp rope. T'ien-kau, (the name of the only rope for which hemp is used, reaching from the mast-head to the tracking-line from No. 98).
53. Moor. K'au-ch'uan.
54. Pull up (a moment). K'au-t'ou.
55. Bow-guy (runs ahead; to prevent sheering out). Cha-lan.
56. Bow-guy (runs across). Ye-lan.
57. Stern-guy. Wei-lan.
58. To change course. Tiao-hsiang.
59. To get or put head into rapid. Chin-tang.

60. To get head into eddy in descending rapid. P'ao-tang.
61. Eddy. T'o. (If at foot of rapid) T'an-sai.
62. To have passed the rapid safely. Lu-wei.
63. Slack water, or eddy, below a rock. Wang-shang-shui.
64. To enter No. 63. Cha-wang.
65. To enter the current or main stream. Kwei Ts'ao.
66. To lie helpless in a whirlpool. Wo-ts'ao.
67. To let your stern be swept round. Tiao-kou.
68. To let your head be swept round. Ts'ai-t'ou.
69. To pull up to avoid danger. Cha-shui.
70. To get a sampan to support your line. Fang-tiao.
71. To haul yourself by hawser fast to shore. Cho-lan.
72. Break-force poles at bow. Kang-tsz.
73. Their gear. Tung-hwa.
74. To be carried out of course by counter current. Ta-ch'iang.
75. The tow-line caught in water. Shui-wan.
76. The coolie whose duty is to watch it. T'ai-shui-wan.
77. The tow-line caught on rocky shore. Kau-wan.
78. The man or men who see to it. T'ai-kau-wan.
79. Outer side of rapid. Ta-wai.
80. To join crews. Ho-tsung.
81. To interjoin crews. Hwan-tsung. } Mutual aid.
82. Feast of pork (thrice a voyage). Shao-shôn Fu.
83. To 'cumshaw.' Shang ch'ien.
84. Navigator of junk (upwards, at bows). Chang-shao.
85. Raise (the line)! T'ai-a!
86. Make fast, or catch. Kwa-chü-lo.
87. Rice-tub. Tsêng-tsz. Its cover. Tsêng-kai-tsz.
88. Gangway planks on each side of galley. T'ien-ts'ao-pan.
89. Sail. P'êng. (Same sound as No. 90, but different word).
90. Mats forming cover at night. P'êng.
91. Stern. P'i-ku; wei; or wei-tsz.
92. Cross-beam in front of mast. Wei-tan-tsz.
93. Poles pinned to each end to support No. 5. Lu-tan-tsz.
94. Pegs at end of 93 to keep 5 in place. T'ai-p'ing-tên.
95. Short peg between 94 for No. 5 to work on in a socket. Chi-hsin.

96. Deck-plank in front of 92. Yu-wei-t'ai-ts'ang.
97. Hard-wood plank in front of 96, supporting two blocks. Ts'ao-hai-pan.
98. Blocks for making fast tow line fixed on No. 97. Ku-tên or Chiang-chün-tên.
99. Pegs fixed in No. 98 to catch tow-line. Ch'i-tsz.
100. Holes in No. 99 in which to thrust a securing chop-stick. Yen or ye'rh.
101. Pegs to keep No. 97 steady. Shwan-tsz.
102. To tie. Shwan. (Also to twist round).
103. Iron hoops strengthening No. 5. T'ie-k'u.
104. Three sockets in No. 5. Shang, chung, and hsia Chi.
105. Under-piece in which sockets are. Ngai-pan.
106. Scupper-holes. Ning-ku-yen.
107. Cross-beam just aft of galley. Cheng-tan tsz.
108. Fan-ends of side-sweeps. Lu Ch'ih-pang.
109. Pegs between which bow-sweep works. Shao-ch'ih.
110. Pegs at each corner of prow. Liang t'ou-mang.
111. Cross-beam on which after end of bow-sweep is rigged. Tung-liang.
112. Pegs at each end of No. 111. Ting-kun.
113. Ladle-like bucket for getting water. Chiao-t'ung.
114. Strong beam of teak or cedar (? *nan-mu*) at water-line, to take the brunt of collisions. La.
115. Hawser steadying mast and stern, and fetched strongly round both, being made fast also to No. 116. Chuan-ku-lan-tsz.
116. Beam projecting from each side near stern. Wu-ma-tan.
117. To gather in. Shou or Pa.
118. To support line with hands, to prevent its touching the ground. T'o-wan.
119. Mop. Chou-p'a.
120. Buffer of rope. K'ao-pa.
121. To strengthen by splicing externally. Pang.
122. Axe. K'ai-chang, or Fu-tsz.
123. Bow of Bamboo, rigged round handle of No. 5, to keep it down. Lu-chiung.
123*a*. Pulley fixed at mast. Kwa-tsz.

124. Pulley ascending and descending. Chuan-chu.
125. Hemp-rope for hoisting sail. Li-shêng.
126. Coir-rope from mast-head to stern. Hwang.
127. Sail-bamboos or reefs. Fêng-kan-tsz.
128. Smaller ditto in front of mast. Pa-wei-kan-tsz.
129. Lowest stays. Chi-chao-shêng.
130. Higher stays. Hsia-pa-shêng.

THE 'VADE-MECUM' OF THE TRAVELLER THROUGH THE GORGES OF THE GREAT RIVER.

1. N. Chih-hsi T'ing; otherwise Hwang-ling Miao. Ninety *li* hence to Lao (Old) Hwang-ling Miao, (No. 66).
2. N. Ho-shang Shih; (*shih* means 'rock').
3. S. Li-chia Ho; (*ho* means 'river' or 'stream').
4. N. Ch'ang chi-tsz; (*chi* or *chi-tsz* means 'shallow' or 'rapid').
5. N. T'un-chia T'o; (*t'o* means 'eddy'). At highest water downward junks must moor here.
6. S. Pi-chia Shan; (*shan* means 'hill').
7. S. Pei Wan; (*wan* means 'curve,' 'reach').
8. S. Hsia Tsz-yang; (*hsia* means 'lower').
9. Mid. Ko-chou Pa; (mid. means 'in mid-stream').
10. N. Erh-chiang.
11. N. San-chiang.
12. N. Shang Tsz-yang; (*shang* means 'upper').
13. S. Ngo Shih-tsz; upward junks use a long line and go by Shan Liu-tsz, (No. 15).
14. N. Lao-hu Tui; (*tui* means 'heap').
15. S. Shan Liu-tsz.
16. N. Nan-ching Kwan. (Opposite Blakiston's 'Musulman Point'). Fifteen *li* from I-ch'ang.
17. N. Nan-mu K'ông; (*k'êng* means 'hole'). At highest water downward junks must beware of whirlpools.
18. N. Pê-lung Tung; (*pê* means 'white;' *tung* means 'cave' or 'hollow'). At high water downward junks should be very shy of the great whirl, and keep round by the south bank.

19. N. Hsia-lau Ch'i; (*ch'i* means 'creek').
20. S. Hwang Mao. Beware of grounding at low water. At high and highest water, beware of whirls.
21. S. Ch'ing-yü T'an; (*t'an* here means 'deep pool').
22. S. Hsiao P'ing-shan Pa; (*hsiao* means 'lesser'). At low water beware of grounding.
23. N. Hwang-chin Tsang.
24. N. Hung Ch'i.
25. S. Ta P'ing-shan Pa; (*ta* means 'greater'). Salt station. Thirty *li* from I-ch'ang. Downward junks should moor here; or, if pressed, at Hung-ch'i. (This is Blakiston's mid-gorge 'Custom House').
26. N. P'ien Nao. Whirls at high water. Large downward junks should go round by the north bank, in order to get into the south current; (*nao* means 'point *to be climbed*').
27. S. Shên K'an-tsz.
28. S. T'ai-kung Pa-tiao.
29. S. Ta-mo Ch'ang.
30. Mid. Shih-p'ai Chu. At mid-water, (*i.e.* neither high nor low), downward junks must be careful in rounding the N. bank.
31. N. Ch'ao-p'ing T'an; (*t'an* here means 'rapid'). Beware of whirls at high water.
32. N. Huo-shang-pei.
33. S. Shih P'ai.
34. N. Têng-ying Hsia; (*hsia* here means 'narrows' or 'gorge').
35. N. Shih-tsz *Nao*; ('point'). Concealed at high water. Go carefully round by the south bank, (downward junks).
36. N. Hwang-sang Tung. When the water is nearly at its highest, downward junks beware of coming to grief here.
37. S. Pê-ma T'o.
38. S. Ha-ma P'ei.
39. S. Hsi *T'an*; ('rapid'). Very angry. Up junks must use a long line, and hire extra men. At mid-water,

also add a middling-sized line, (*êrh-hsing-t'an*; the thickest is the *tso-t'an*: the ordinary one the *fa-rh-t'an*; and the thinnest the *fei-t'an*, or *fei-fei-rh*).

40. N. Chu Chüan-tsz. Careful at high water, (downwards).
41. N. T'ien-chu Shan.
42. N. Nan *T'o*; ('eddy'). Thirty *li* from P'ing-shan Pa. Disturbances caused by sunken rocks, (*p'ao*); and whirls, (*hsüan*), both very bad. Downward junks making the north bank must keep the ship's head steady, or they will come to grief at Hwang-sang Tung, (No. 36).
43. S. Shui-t'ien Chio, (or Kio or Ko); (*chio* means 'point').
44. S. Ma-ngan T'an. At highest water take the channel with one line. At mid-water use two lines, and keep out of the channel.
45. N. Ts'u-shih T'an.
46. N. Tou-p'êng Shih.
47. N. Tou-shan T'o. Moor here (downwards) at lowest water.
48. N. P'u-kai Shih. Downward junks beware of grounding on sunken stones.
49. S. Kwo-yüan Yen; (*yen* means 'cliff').
50. N. Hsia Nan Ch'i.
51. S. Ch'ing-shui T'an. One large and one small line at highest water. At mid-water two large lines. Large junks hire extra hands as far as Pê Tung-tsz, (No. 106).
52. S. Ju-i, or Wu-i T'an. Covered between high and highest water. Vessels drawing 4 and 5 feet should take the old channel by the south bank, in order not to come to grief on the north side. If they *must* take the north side, they should not be too confident.
53. S. Kao wei-tsz.
54. N. Chiu-ming Shih.
55. N. Hung Shih-tsz. At mid-water, Chapo Rock should be kept open by downward junks. The vessel should not sheer out, or get into the current. This rapid is very dangerous. Beware of counter-currents.

56. S. Cha-po. At highest water upward junks may take the channel with two lines. At mid-water, also two lines, but avoid the channel.
57. S. Kwan Ts'ao. At highest water Hung Shih-tsz is in the line of downward junks, but small junks may take this channel, (*ts'ao*).
58. S. Hwo-mao Chu. Beware of grounding at lowest water.
59. N. Sz-fang T'o.
60. S. Ta Lang Hung. At highest water two lines.
61. S. Hsiao Lang Hung. At highest water two lines.
62. Mid. N. San Chu; (*chu* means 'often sunken rocks'). Ya-tsz Rock is at the point of this. Upward junks beware of grounding at lowest water.
63. Mid. N. Erh Chu. (*Tou, êrh. san* mean 1, 2, 3).
64. Mid. N. T'ou Chu. Take the south bank *at all times.*
65. S. Liu-yü T'an, or Liu-i T'an.
66. S. Lao (or Old) Hwang-ling Miao. (See No. 1). Thirty *li* from Nan T'o, (No. 42). At highest water Cha-po Rock, (No. 56), should be kept open by downward junks.
67. N. Tien-têng Shih. Beware of grounding at low water.
68. S. Tai Shih. Two lines at high and mid-water; junks be careful how they come alongside at the jaws of these narrows.
69. S. San-chia T'o.
70. S. Ch'i-kou T'ou. Beware of breaking adrift going up.
71. S. Lei-p'i Shih.
72. S. Hsia Lu-Chio. (Lower Deer-horn Rapid; the first I encountered in November). Upward junks keep in the channel at mid-water. Between mid and low water avoid the channel, and use extra strong line.
73. S. Mei-mao Chu. Downward beware of grounding at low water.
74. N. T'ung-ch'ien Tui.
75. S. Shang Lu-chio, (or ko). (Upper Deer-horn Rapid). At full mid-water upward junks keep the channel. At low mid-water avoid the channel, and use line of extra strength. At low water mooring junks

should use a long hawser. It is bad to make a start from this place, as there is a great risk of breaking away.

76. Mid. T'ai Hung Chu. At low water downward junks can take the old channel by the north bank.
77. N. Wêng Tung.
78. N. Pa-ho K'ou.
79. S. Hwa-lin Chi.
80. S. Ma P'i-ku. At high water downward junks should keep to the South bank, in order to take up the current on the north side.
81. S. Pien-yü T'ao.
82. S. Mao-chia Tung. Upward junks taking this channel should keep a long hawser out, (*i.e.* line).
83. S. Nan Hu. At full mid-water upward junks may keep the channel with a strong line. At exactly mid-water, avoid the channel, and use a longer line.
84. N. Pei Hu; (Nan, Pei mean 'South, North').
85. S. Tiao-yü Tsui. At high water a very strong tracking-line.
86. S. Shan-tou P'ing. (Blakiston's Shan-tow-pien). At high water downward junks may moor here.
87. S. Chung Pa. Upward junks at high water may keep the channel. At full mid-water they should keep outside the bank, (*pa*). When there is a breeze, at highest water upward junks may take the channel, and cross to Cha-lan k'ou, (No. 108.)
88. N. T'an-chia T'o.
89. S. Lo Wei. At mid-water upward junks should use a long hawser.
90. S. Shih-ching T'an. At high water upward junks should use a long hawser.
91. S. Hwang-shih-pan.
92. Mid. Chuan-shan Chu. Beware (downwards) of grounding at low water.
93. N. Hwang-la T'an.
94. S. Kwo Lung-tsz. Upward junks should use a long hawser at lower mid-water.

95. S. Pê-la T'an.
96. N. Ye-pei-hsiang-yü-tsui.
97. N. Twan T'an.
98. S. Mao P'ing. The boundary between Tung-hu (I-ch'ang) and Kwei Chou. At highest water upward junks may cross here if the wind is favourable.
99. S. T'ie-lu Pei. A long line at high water.
100. S. Têng T'an. Two lines at high water. At full mid-water one strong line. If the junk cannot venture in the channel, halt at Pê-tung-tsz, (No. 106), and cross to the north.
101. N. Niu-kang Pei. At high water upward junks should take the river side (outer) of the race, and beware of breaking loose.
102. S. Ch'ang-fu T'o. Downward junks beware of grounding when the shallows are under water.
103. Mid. Pien-tan Shih. Downward junks beware of grounding at low water. When lowest, the rocks can be seen.
104. S. Chi-cha-tsz. Upward junks beware of grounding at mid-water.
105. S. T'a Tung. (Blakiston's 'Kwa-dung'). Two lines at low water, and extra coolies. Downward junks should take the north bank at low and mid-water, in order to get into the south current and river channel.
106. S. Pê Tung-tsz. Upward junks at high water use three lines and keep the channel. If they keep outside (river side) of the current, two lines. Both inner and outer courses are dangerous, and require caution.
107. N. Ya T'an.
108. N. Cha-lan K'ou. At highest water upward junks should keep to the channel with three lines out.
109. Mid. Ta Chu.
110. S. Hwang-shui Hao. Beware of grounding at mid and low.
111. S. Hsia Yang-pei. At mid-water, use a long tow-line. At high water, cross the river if there is wind.
112. N. Wu-hsiang Miao; (*miao* means 'temple' or 'joss-house').

113. S. Shang Yang-pei. Long line at mid-water. Cross to the north bank (upward junks) if wind favourable.
114. N. Ching Chiang. At high water upward junks use one long medium line. On getting beyond, change for a strongest line as far as Ta-ming Ch'i, (No. 117). Beware of breaking your line here.
115. N. Chia-ku Shih. Downward junks at high water take the north bank, in order to take up the current on the south side. Be very careful not to get swept against the south bank.
116. S. Yin-bèn T'o. Downward junks can moor at low water.
117. N. Ta-ming Ch'i.
118. S. Hsien-jên Ch'iao; (*chiao* means 'bridge'). If downward junks can see the bridge exposed, go ahead. If not, then Hung-shih-tsz, (No. 55), will be in their line, and they must moor at Chung Pa, (No. 87), or pull up there.
119. N. P'ien Yen-tsz. Downward moor at high water.
120. N. Hêng Liang-tsz. Very dangerous and angry at high water, when extra men must be hired.
121. S. Ch'ü Ch'i. Thirty *li* from Mao P'ing, (No. 98), and 60 from Old Hwang-ling Miao, (No. 66). One great stage upwards to Kwei Chou.
122. Mei-jên T'o. Downward moor at mid-water. In starting off in spring and winter, beware of fogs. In the 3rd and 4th moons beware of sudden squalls.
123. Mid. Chai-kung Shih ('rock'). Caution! Covered at mid-water.
124. S. Nan-lin Ch'i.
125. N. Hê (or hei) Yen-tsz (or yai-tsz). (*Hê* or *hei* means 'black.' *Yen*, *ngan*, and *yai* mean 'cliff,' indifferently).
126. N. Ch'ai P'êng-tsz. Lighten ship at low water downwards.
127. S. Lung-hsü T'o. Place for lightening downward ships at low water.
128. N. Shan-mu Ch'i.

129. N. Ya-taz Shih. At very lowest water, large upward junks should avoid the main channel; small junks keep it. Beware of grounding in shallow places.

130. Mid. S. Pei Tan Chu ('submerged rock'). When the rapid is covered smooth, downward junks should beware of striking here. This rock absolutely requires caution.

131. S. Hsiao K'ung-ling (or T'ung-ling). Downward junks at low water beware of Ya-taz Rock, (No. 129). The race is very angry, even when smoothed over, and requires care.

132. N. Liu-Liu Chi. Upward junks two lines at high water. Beware of grounding at low water.

133. N. San Chu. At lowest water upward junks keep the river side of the rapid with a long line, and at low water keep the channel. Downward junks beware of grounding on the outer side of the rock at low water.

134. N. Erh Chu. Downward beware of grounding at low water.

135. Looking inwards. Hwang Ch'ien; (*ch'ien* means 'shallows'). Downward junks beware of grounding at low water.

136. N. Ta Chu.

137. Mid. K'ung Ling (or T'ung Ling). At low water downward junks should, when a down-river breeze is blowing, anchor at Lao-kwan Miao, (No. 140), and not start from hence. They should also engage a local pilot (*t'an shih*).

138. N. Ho-shang Shih.

139. N. Yüan-yang Shih. When this rock is covered, Hung Shih-taz is in your line. (See No. 55).

140. N. Lao-kwan Miao. Thirty *li* from Ch'ü Ch'i, (No. 121). Upward junks can only enter the gorge with a fair wind. Downward junks anchor here.

141. N. Têng-taz Shih. When at high water downward junks find a channel over this rock, they may be sure that the water is at its highest at Hung Shih-taz. (See No. 55). When the channel is dry, pull up at Hung Shih-taz.

142. N. Liao-yeh Wan. Upward junks may only start hence at high water with a strong breeze. Downward junks at high water should beware of getting into an eddy.
143. S. Chiu-wan Ch'i. After 2 p.m. beware of squalls.
144. N. Mu-jên Pei; (*pei* means 'promontory'). Downward junks beware of violent whirls at high water.
145. N. Niu-kan or Ma Fei Gorge, (Blakiston's Lu-kan).
146. N. T'an-ch'uan Wan.
147. Mid. Ku-ch'êng T'an.
148. N. Ma-ts'ao Pei. Upward junks should not proceed at mid and low water when the breeze is against them. When everything is covered over at high water, hire extra trackers.
149. Ch'ing t'an or Hsin T'an, No. 3. (Nos. 1 and 2 higher up).
150. N. Shê-hung Chi. Upward junks be careful how they anchor at low water when a strong favourable breeze is blowing up the gorge.
151. N. Chi-ch'ih Po.
152. S. Chiang-chün T'an.
153. N. Yao-tsz Yen (or Yai). At low water both up and down junks beware of grounding.
154. N. Ch'ing T'an, No. 2. Thirty *li* from Lao-Kwan Miao, (No. 140). At full-mid, low-mid, and lower water, use two lines, and beware of grounding.
155. N. San-kwai Shih.
156. N. Mu-chu Shih.
157. N. Yin Wo-tsz.
158. N. Ch'ing T'an, No. 1. Upward junks at mid-water require three lines. When the water is smoothed over, four lines. At low water cargo should be discharged and carried overland, the junk taking the outer or river side of the rapid. At lowest water be careful of grounding at Ya-tsz Shih, (No. 129). Be careful in mooring, and at low water take pilots both up and down. (This is Blakiston's 'Tsing T'an Village and Rapid').

159. Mid. Chi-hsin Shih.
160. N. Pê (or pei) Ts'ao; ('channel'). When Ping-p'an (Rock, No. 179), has two feet of water over it, junks may take this channel.
161. S. Nan Ts'ao.
162. S. Ching Shih-tsz.
163. N. Hwang Yen.
164. N. Shan-yang Chio. At highest water the whirls are prodigious: upward junks should not proceed with too strong a breeze.
165. S. Wa Kang. The mountain fell in here in the second year of Chia-ching of the Ming Dynasty, and gave rise to the Ch'ing T'an Rapids.
166. S. Hê-t'ao Pei.
167. S. Hsiao Hsin T'an. Downward junks may moor at either bank when the water is low.
168. N. Shih-hu T'o.
169. S. Mi-ts'ang Tung.
170. N. Ping Shu Gorge, or Pao-chien Gorge.
171. S. Mi-ts'ang Gorge. (Blakiston's Mi-tan).
172. N. Hsiang Ch'i. Upward junks be careful how they approach this place with a favourable breeze. In the afternoon the squalls are apt to be violent.
173. N. Hwang-yu San-kun. A long line at mid-water.
174. S. Tung-mên T'ou.
175. S. P'u-ch'uan Ho.
176. S. Jên-an Shih. Downward junks may moor at high water.
177. S. Chu-tsz Liang; (*liang* means 'ridge').
178. N. Hwo Lu-tsz. At low water upward junks use a long line.
179. Mid. Ping P'an Rock. At low water upward junks use a long line; downward junks may take either side when only one or two feet of the rock are exposed, but they should not venture on with the up breeze against them.
180. S. Nan-shih Mên. At low water downward junks should keep the south bank, in order to enter the current at

Pei-shih Mên, (No. 182). In passing Ping-p'an rock, the old channel should be kept if three feet of the rock are exposed.

181. S. Hwang Ch'ien. At low water the shallow places are 25 to 35 feet outside Nan-shih Men.

182. N. Pei-shih Mên. At mid and low water, up junks may cross the river below Nan-shih Mên. Downward junks beware of rough water, locally called 'white dragon,' (*pê-lung*), in crossing: they should be prompt and ready with their arrangements, or else they will be wrecked on the Ping-p'an Rock, or its shallows.

183. S. Nan Ts'ao. At high water upward junks keep the channel. At mid-water keep on the outside of the rapid. At high water the outside may be taken with a strong breeze only.

184. Mid. Ch'ü-yüan San-p'ao. At low water, downward junks should go round by the south bank, in order to get the north current at Pei-shih Mên, (No. 182). Wrecks on Ping-p'an Rock are all owing to want of care in this respect.

185. S. Old Kwei Chou (City). Downward junks mooring here at low water should not start against the breeze, lest they should come to grief on Ping-p'an Rock.

186. S. Sz-chi Tang. At lower mid-water upward junks should keep clear of the eddy in ascending the rapid.

187. N. Tu-yen Lung. At mid and low water downward junks should keep the north bank, in order to take up the south current.

188. S. Lien-hwa-tsz. Upward junks at low and mid water beware of being borne upon the bank of the river.

189. Mid. Wu Shih, (Black Rock). At mid water and smooth water downward junks rounding the point by way of Kun-tsz Chio, (No. 192), must be wary.

190. Mid. Mi-ts'ang Shih, ('rock'). Upward junks take the eddy at low water. Downward junks mind not to get wrecked here. At lowest water junks cannot pass here.

191. S. Fang T'an. Upward junks hire extra men and pay out two lines at low water. At high water beware of breaking away.

192. S. Kun-tsz Point. Extra coolies and two lines at high water. Downward junks must always keep the point open, *lit.* 'hold it in their mouth.' Slackness in this matter will carry them on to the rocks. If Black Rock is covered, there are four or five feet of water here. Either bank.

193. S. Cha Chio-tsz.

194. N. Hu-p'i Liang. At highest water, downward junks be careful not to come to grief here.

195. N. Kwei Chou (City). One great stage from Ch'ü-ch'i. Of late years junks (as did mine) take the Tso-fang Kou on the South Bank, (No. 201). (*Kou* means 'ditch.'

196. N. Lei-mên Tung.

197. N. Tsz-ching T'o.

198. S. T'ai P'an-tsz.

199. S. Shih-tsz Shan.

200. N. Lao-hu Shih. Dangerous for downward junks at high water: they should take the south bank. If the river is swollen, or the wind high, they should not venture down. (Junks had been detained when I passed). Upward junks may keep the south bank at high water when 8 or 9 feet of the rock are exposed.

201. S. Tso-fang Kou.

202. N. Kwan Ts'ao.

203. S. Lan-yü Fang.

204. S. Sao-ying San-pei. Upward junks haul up below the point and use two or three lines. They can only progress with a breeze.

205. N. Ch'a-shên Miao.

206. S. Pa-ti Hu. At high water, downward junks for Kwei Chou should put their helm here in such a way as to go round by the south bank, in order to take up the north current. They should not start with a strong breeze against them, or they will be wrecked on Ping-p'an Rock, (No. 179).

207. N. Hwang-san-hao.

208. N. Tu-shu-tsz. Very dangerous for upward junks at high water. Beware of shallows in mooring at the entrance to the gorge. When the Lao-hu Rock, (No. 200), is exposed 8 or 9 feet, junks must take the Liu-lai Kwan channel, (No. 211).

209. S. Ye-chu Héng-chiang. At mid-water, when there is angry water from the creek at Liu-lai Kwan, there are nasty whirls to be guarded against by small upward junks.

210. N. Chêu-wu Chi. Upward junks take the inside of the shallows (*chi*) at mid, the outside at low water, and use two lines.

211. S. Liu-lai Kwan. At highest water upward junks keep the main channel.

212. N. Yao-ku T'o. Downward junks moor at highest water, but do not start with a breeze down river. If the river is swollen, keep a good look-out for Loa-hu Shih, (No. 200).

213. N. Fan-tsêng Nao. Whirlpools bad at low water.

214. N. Ye Ch'wang.

215. N. Ye Chêu.

216. N. Ye T'an (Blakiston's Rapid of Yeh T'an). Upward junks at full-mid-water keep the channel with four lines: small junks three lines. At exactly mid-water and smooth water, tranship cargo. At low water boats may be hauled up either bank. (When I went up in November, only small junks could take the south bank. This was our worst rapid). At lowest water look out for shallows at the entrance. Downward junks at low water should go round by the north bank in order to get the south current.

217. Mid S. Yang-tsz Shih. Downward look out for grounding at low water.

218. N. Ch'i Tsz-mei. Ditto.

219. N. Mang-she Chai.

220. S. Hsiung-hwang Shan.

221. N. Shang Shih-men. Upward junks may cross the river

at high water only if they have a breeze. Downward junks come across frightful whirlpools at highest water. They should go round by the south bank in order to get the north current. Small junks must be specially careful.

222. S. Hwang-chang Pei.

223. N. Chang-chia Ch'i.

224. N. Hsiao Pa-tou. Dangerous for upward junks at high water. With a favourable breeze junks crossing the river should 'cap the head' of the rapid.

225. N. Ta Pa-tou. Thirty *li* from Ye T'an. Upward junks use two lines at mid-water; at high water, three, with a stern hawser. Downward junks at high water go round by the south bank in order to get the north current. At highest water the whirls are very dangerous to small craft.

226. S. Kou-shih T'o.

227. N. Niu-k'ou. (Blakiston's Niu-kow-tan). The border between Kwei Chou and Pa-tung Hien Districts. At all times upward junks require four lines. With a strong upward breeze they should also have out a stern hawser, to use in shooting the vessel out.

228. Mid. Ya-tsz Shih. At high water downward junks should examine the watermark registered at Niu-k'ou; and, in making Niu-k'ou, keep close in to the south bank, in order to get the north current.

229. N. Ch'i-kou T'ou. Dangerous at full-mid-water. Upward junks be careful not to break away.

230. N. Hwang Liang-tsz.

231. N. T'a Ho.

232. S. Hung-shih Liang.

233. S. Chi Ch'ih-pang. At full-mid and exact-mid water take care not to break loose going up.

234. N. Kwo-lung T'o. Upward junks mind shallows at low water.

235. N. Ta Hwang-la Shih.

236. N. Hsiao ditto.

237. S. Pa-tung District City. Thirty-five *li* from Ta Pa-tou,

(No. 225). Ninety *li* from Kwei Chou. At full-mid-water down junks may moor here, but *not too far down*, on account of shallows.

238. S. Ch'ing-chu Piao. At full-mid-water upward junks may take either bank. At lower-mid-water junks should follow the north bank to get the south current. Be very careful not to be carried on too far north.

239. N. Tung-hsiang K'ou; (*tung* means 'east'; *hsi* 'west').

240. S. Wan-hu T'o.

241. N. Mei-nü sai-hsiu.

242. N. Chiang-chün T'an. At high water, two lines upward.

243. N. Niang-niang T'an.

244. N. Hsi-hsiang K'ou. (Blakiston's Si-an-kow). Downward junks moor at highest water. Upward junks must cross at low water. At lower-mid, beware of shallows.

245. Mid. Mu-chu-êrh. This channel can be taken by upward junks at mid-water.

246. N. Mu-chu T'an. Strong line required at low water. At mid-water the north bank cannot be taken.

247. S. Mu-chu Chi. At mid and low water all junks may take the north bank upwards.

248. N. Kwan-tu K'ou. (Blakiston's Kwan-du-kow). A salt station. Thirty *li* from Pa-tung. At high water downward junks must not moor too high, nor yet too low. This is the place for changing the helm. If vessels cannot moor here, they can moor at Hsi-hsiang K'ou. Starting hence at low water, vessels must get *exactly* into the current. Upward junks can only progress at high water with a breeze. If there is no breeze they should pull up, or they are liable to be wrecked at Mu-chu T'an, (No. 246).

249. N. Lung-wang Miao.

250. N. Chi-kwan Shih.

251. S. Têng-chan Wo.

252. S. Niu-êrh Pei.

253. N. Mên Hwan-tsz. At high water, downward junks of

all sizes should go round by the north bank to get into the south current.

254. S. Hwo-yen Shih. At high water, when there are 5 or 6 feet of water on this rock, upward junks should mind not to break loose. If there is only a foot or so of water, halt there; and, if the junk takes the channel, use two tow-lines. If 8 or 9 feet of the rock are showing, take the outer side of the rapid, and moor. Care required in then shooting out the vessel. Downward junks beware of huge waves when there are 8 or 9 feet of water on the rock.

255. S. San Chung-tsz. At highest water, upward junks require three tow-lines: at mid-water two. As the whirls are great, beware of breaking loose.

256. S. Yang-chia P'êng.

257. S. Hsia-tso T'ien. At high water upward junks can only advance with a breeze. Ch'ung-k'ing junks (*wupan*) should go in front as pilots. If there is no breeze, and the junk moors, great care required in again shooting out the junk's head.

258. S. Lao San-chung-tsz. Upward junks require two lines at high water, and cannot advance without wind.

259. S. Ye-hu San-pei. Upward junks must be careful at high water.

260. S. Hsüan-yen Pei.

261. S. Nan-mu Yüan. (Blakiston's Nan-mo-yuen). Downward junks may moor at low-mid water. 30 *li* from Kwan-tu K'ou.

262. S. Ma-shih T'an.

263. S. Hung-yen Chi.

264. S. Hsiao Yen-wo Shih. Downward junks beware of this rock at mid-water.

265. N. Hwang-ho K'ou.

266. N. Fu-ling Chi. Upward junks at smooth water use one long line: at low water, two.

267. S. She T'un Hsiang. Downward junks at highest water may moor.

268. N. Leng-shui Chi. At smooth water, upward junks may

cross with a breeze. If no breeze, use two lines. At low water, the current is so strong that extra men must be hired.

269. N. Wan Liu. 30 *li* from Nau-mu Yuan, (No. 261); and one great stage, (90 *li*), from P'a-tung.

270. S. P'ai T'o. Downward, look out for huge whirls at highest water.

271. N. Chin P'ien-tan. Upward junks can only advance at high water with a breeze.

272. N. T'ie Kwan-ts'ai.

273. S. Hwang-la Pei. Upward junks should only attempt to advance when there is a breeze.

274. S. Hsiang Lung Shih.

275. N. Pien-yu Ch'i. Otherwise Pu-tai K'ou. The border between Sz Ch'uan and Hu Pei. Fifteen *li* from Wan Liu, (No. 269); I-ch'ang 435 *li*. One side of the gully (*ch'i*) belongs to Pa-tung, the other to Wu-shan. Great whirlpools at highest water.

276. S. P'ei-shih. (Blakiston's Pei-shih). Upward junks require two lines at mid-water. Care required in shooting out after mooring. Beware of breaking loose at low water.

277. S. Pe Shih Lu. Submerged rock; disturbances and whirls at highest water.

278. N. Tau-shih Kwan, ditto.

279. S. Hwang-ts'ao P'o.

280. S. Shan-mu Jang. Upward junks should not advance at high water without a breeze.

281. S. Sz-yen Ch'i.

282. S. Hsiao Mo. Upward junks should only advance at high water with a breeze.

283. S. Ta Mo. Downward junks take the south bank at high water. Small craft mind the large whirls at high water.

284. S. Wu Liang-tsz. Two lines at high water. In entering the rush of water, mind you do not get embarrassed by the river bank. Great care needed. Do not advance without a breeze.

285. N. K'u T'ao-tsz. At high water, lightly-laden upward junks may hoist sail to a favourable breeze. Heavily-laden ones should cross to the north bank, and anchor in the creek, being towed out of the creek to Wu Liang-tsz.
286. S. Ch'ing-shih Tung. From Wan Liu, (No. 269), thirty *li*. At high water upward junks should moor unless they have a breeze.
287. S. Wang-fu Yai.
288. N. San-hsia Shui. The wind is apt to veer round here.
289. S. Man Ch'on. Downward junks mind the whirls at high water.
290. S. Pa-wang Ch'u. Upward junks only advance with wind at full-mid.
291. S. Chin K'wei.
292. S. Chin Chia. Downward junks moor at low water.
293. S. Tan-tsz Ch'i.
294. S. Lao-shu Ch'u. Only advance upwards with breeze. Whirlpools bad at mid-water, when a long line should be used. Downward junks, exercise great care.
295. N. Hêng-shih Ch'i.
296. S. Shang Tso-t'ien. With a Ch'ung-k'ing junk as pilot, a large junk may go up under sail, and even cross over. If the breeze is only a light one, she should moor, and take care how she shoots out again.
297. S. T'iao Shih. Long line at high water. With a breeze, either bank at mid-water.
298. N. Kung-chia Fang. Two lines at low water.
299. N. T'iao-shui Mai-ts'ai.
300. S. Mei Hê-tsz. Two lines at low water. Downward junks taking the north bank must be sharp in turning the junk's head.
301. N. K'ung-wang T'o. Upward junks, take care in crossing at high water. At low and mid-water downward junks beware of coming to disaster here.
302. S. Hsiu Shih-tsz. Upward junks two lines at low water. At low water downward junks sheer off here,

and keep close to the south bank in order to catch the north current.

303. N. Hung-sha Chi.

304. N. Wu-shan (City). From Ch'ing-shih Tung 60 *li*. One great stage from Wan Liu, (No. 269). Downward junks should halt at low water if the wind is against them. At highest water, if many junks are starting together, beware of crowding.

305. N. Niu-shih Tui.

306. N. Ta-mê T'o.

307. N. Hung-shih Liang. A long tow-line at low water.

308. N. Wu-chi. Two lines and extra coolies to ascend the rapid at low water.

309. N. Hsia-ma T'an. (Blakiston's 'Rapid of Hia-ma'). From Wu-shan 25 *li*. Exceptionally dangerous: two lines at low water, when downward junks find best safety in going straight down the rapid. (Both upward and downward junks followed these directions when I passed in November. This was one of our most difficult rapids).

310. S. Chiang-chün T'an. Two lines at mid-water.

311. N. Yü-t'u Yen.

312. N. Tung-kwan Tsui. A K'wei Kwan, (No. 366), Customs Station. Downward junks moor at low water, and do not start against a strong wind. Extra men for upward junks.

313. N. Hu-chau Shih. Be careful not to break loose at high water.

314. N. T'o Tu-tsz. At low water upward junks may cross with a breeze: without one, extra men and line. Downward junks for Tung-kwan Tsui alter their course here in order to get the south current.

315. N. Tu Shu-tsz. One line at low; two with extra men at mid.

316. S. Hsia Nan-tsui. Downward junks at mid-water must catch the current here, or they will get into the eddy.

317. N. Shan Lan-tsz. At low and mid-water, upward junks should be careful in entering the swift current not to

get the line foul of their bow-sweep. Extra men and line at mid-water, when the junk's stem is apt to be swept round.

318. N. Lung Pao-tsz. From Hsia-ma T'an, (No. 309), 30 *li*. At high water upward junks require three lines and extra men. At mid-water two lines. If there is water for the junk in the Shang Nan-Tsui (No. 320) Channel, take the south bank.

319. S. Chiao T'an. Two lines at high water.

320. S. Shang Nan-Tsui. Use this channel if possible, with a long line. At high water, downward junks must be kept with helm steady, or they will be caught by the eddy.

321. N. Hwang-chang Pei. Dangerous whirls. Upward junks mind not to break loose at high water.

322. S. Hsi-fang T'o.

323. S. Ch'u-ch'ih P'an. At highest water use a long hawser.

324. N. Yu Ch'ang-tsz.

325. N. Shen-tz Yen. Dangerous whirls for upward junks at high water.

326. S. Ts'o-k'ai Hsia.

327. N. Ch'ing Yen-tsz.

328. N. Yu-cha Chi. Most dangerous at low water. Use a strong line.

329. N. Ts'ao-chia T'o. Downward junks moor at low water.

330. S. Li-kwai T'an.

331. N. Kan-yu Shih.

332. N. Hu Hsu-tsz. Downward junks take the south bank at low water in order to catch the north current. This place is dangerous; mind you do not run on the river bank.

333. N. Chin-yin Ho. Downward junks may moor at low water.

334. N. Ngo-kou Tui. Upward junks mind not to break away at low water.

335. S. Tai Ch'i (Blakiston's Tai-chi). From Lung Pao-tsz, (No. 318), 30 *li*. One great stage from Wu-shan. Downward junks may moor at high water.

336. N. Pe-kwo Pei. At highest water upward junks may, with two lines and a breeze, advance. Whirls bad; on no account go on without a breeze.

337. S. T'ie T'an. At high water downward junks mind disaster here.

338. S. Mao-erh T'ou.

339. S. Chih-ma Shih. Downward junks mind disaster here at high water.

340. N. Chi-hsin Shih. At high water very dangerous for upward junks when the water is disturbed. When the junk enters the rapid, it must head for the 'chow-chow' water, and keep steady in mooring, starting again in a few moments.

341. S. Hê Shih. At high water, upward junks only advance with a breeze. This is the most dangerous place in the Chü T'ang, (*i. e.* the literary name of the Bellows Gorge).

342. N. Yen-hsü Ts'ao. Upward junks at highest water keep to the 'foot of the mountain:' then keep the main current: if the breeze is favourable take the Hê Shih course on the south side.

343. N. Hwang-chin Tou. At high water, junks taking the Carraway-seed Channel, (Yüan-sui Ts'ao), must turn thoroughly well round.

344. N. Shan-kên Ts'ao; ('foot of the mountain channel'). At high water upward junks may take this channel with a stern hawser out.

345. S. Hsiao-Hê-shih. Downward junks at high water must go round by the north bank. They must not let their head be carried round, nor let their stem be swept out of the course.

346. N. Shan-tsz Shih. The boundary between Wu-shan and Fêng-chieh, (K'wei Kwan or K'wei-chou Fu), Districts.

347. N. Kan Kou-tsz. At high water only advance upwards with a breeze. At high water downward junks take care not to strike the banks.

348. N. Fêng-hsiang Hsia. Bellows Gorge (a wooden bellows

placed in an inaccessible crevice up the rock is pointed out to the traveller as having been inserted there by the famous K'ung Ming, or Chu-ko Liang). (This is Blakiston's 'Wind-box Gorge').

349. N. Shih-pan Chia. At high water upward junks may cross, but only with a breeze. At high water, downward junks must go round by the north bank, and just hit the current, *when only* they will catch that current which runs past Tao-tiao Ho-shang. The least fraction too high or too low will not do.

350. S. Tao-tiao Ho-shang.

351. S. Shu-chwang T'ai.

352. S. T'ai-tsz Ko.

353. S. Mêng-liang T'i.

354. S. Fên-pi Ch'iang.

355. S. Nan-nü K'ung. Downward beware of whirls at high water.

356. S. Shih Pi-tsz.

357. N. T'ie-chu Ch'i.

358. S. K'un-niu Shih.

359. Mid N. Yen-yü Shih (or Yen-wei Shih). The most dangerous place for downward junks at mid-water, for they must allow themselves to be carried with the swift current. If they are caught by an eddy they must veer round and moor, waiting until the water is slacker before they start afresh.

360. N. Pê-ti Ch'éng.

361. S. Ma-ngan Shih.

362. N. Ch'ou-yen Chi (means 'stinking salt shallows,' because in the winter months inferior salt is obtained here in the manner described by Captain Gill). Upward junks at mid-water keep the channel. At low water keep outside the low bank, (as we did in December).

363. S. Ch'ing-lung Chio. This is a beacon for Hê Shih, (No. 341). If this point is covered, the water is at its highest at Hê Shih, and junks should not start until the foot of this last rock is out of water.

364. S. Hsin-k'ai T'an.

365. S. T'ung-ch'ien Tui.

366. N. K'wei-chou Fu, or K'wei Kwan. (Blakiston's 'Quai Chow'). Thirty *li* from Tai-chi, (No. 335). Downward junks may moor at low water, and pull up at mid-water. Great caution required if a strong down breeze is blowing. Look out for the banks falling in in the 3rd, 4th, and 5th months.

SPECIAL OBSERVATIONS.

No. 17. The whirlpools are caused by the rush of water northward from Pê-lung Tung, (No. 18). Most dangerous at high water.

Nos. 26 and 27. Diagonally opposite: owing to the narrowness of the channel, the rush of the current at high water is most dangerous.

No. 30. Vertical in mid-stream. Most dangerous at high and mid water, when the current dashes against it.

No. 36. At high water most dangerous, when the current from Hsi T'an, (No. 39), dashes into the hollow (*tung*).

No. 55. Hung Shih-tsz is the most dangerous of all the rocks about here. Spring and summer are the worst times, when the course of the current is very tortuous.

Nos. 72 and 75. The jagged rocks on one side of the river form the danger here.

No. 83 and 84. Opposite each other. The confined waters are most dangerous in summer and autumn.

No. 94. The swift current causes whirls. Most dangerous in summer and autumn.

No. 105. Dangerous at all seasons, on account of the irregular rocks lashed by the current in the river channel.

Nos. 111 and 113. Less dangerous since A.D. 1789, when some of the rocks were swept away.

Nos. 133, 134, and 136. At the entrance to the K'ung-ling Gorge, right in the middle of the river. (? Downward) junks must turn to the left in leaving No. 136; then seize the helm, and turn to the right. The slightest mistake will bring them on the rocks. K'ung-ling so called because you must *k'ung* (empty) the vessel's *ling* (? hull)'!

No. 158. The most dangerous rapid of the gorges. Confused rocks on either bank, and treacherously submerged in the channel. Most dangerous in winter and spring, when only lightly-laden junks can pass up and down. Others must discharge cargo.

No. 170. Tradition says, so called because K'ung Ming, or Chu-ko Liang, concealed troops here.

No. 173. Sunken rocks most dangerous at mid-water.

No. 179. (Here called Chin-p'an Shih). Is almost conterminous with the stones about Nos. 180 and 182, and quite obstructs the current. Most dangerous at low water.

Nos. 180 and 182. Dangerous at all times.

No. 184. Chow-chow and whirlpools; most dangerous at high water.

No. 188. Three whirlpools in mid stream, with a confused mass of jagged rocks. Most dangerous at mid water.

No. 205. The roar of water on the nine parallel lines of rocks is like thunder in the 5th and 6th moons.

No. 216. The rocks in mid-stream are Nos. 214 and 215. The water striking against these causes whirlpools. Most dangerous at high water. [There is a proverb, 'Yu ch'ing wu yeh,' 'Where Ch'ing T'an (is dangerous you need) not (fear) Yeh T'an;' but the Yeh T'an must have altered recently, as neither Blakiston, Gill, nor the Chinese books make much of it; whereas we found it, and heard it spoken of, as our only very serious rapid in November.]

No. 221. The foot of the hills on either bank confine the river. The current is most dangerous at high water.

Nos. 224 and 225. Most dangerous in summer and autumn. The current rushing south forms bad chow-chow water.

No. 227. The rubble at the foot of the mountains here goes right into mid-stream. Dangerous at all times.

No. 238. Properly the name of a snake. Alludes to the tortuous current.

No. 246. Large rocks obstruct the current. Dangerous both at high and low water.

No. 254. The roar in spring and summer is heard three miles away.

No. 272. A stone lying in an inaccessible place gives the gorge its name.

No. 275. The border. Most dangerous at high water.

No. 278. Whirlpools in summer and autumn.

No. 282. Summer and autumn rapid.

No. 283. Observe the 12 peaks opposite. Whirls, summer and autumn.

No. 285. Rocks above and waves below. Worst in summer and autumn.

No. 288. Upward junks, look out for shifting winds.

No. 289. Whirlpools in summer and autumn.

No. 290. The water, but occasionally only, is frightfully angry in summer and autumn. It is easy to avoid danger.

No. 294. Care required in summer and autumn.

No. 297. So called because a rock once rolled down the south bank, and caused the present danger. There is also a fairy legend connected with this place.

No. 301. In summer and autumn the whirlpools are sometimes 100 feet in diameter, very dangerous, and most difficult to avoid.

No. 309. In the spring and winter, when the water is low, the river bed is full of rocks in all directions, and the confusion immense; however, the current is not very rapid.

No. 312. The lower K'wei Kwan Customs Station.

No. 315. At mid-water the water is most furious. Great care required.

No. 317. (Here San Lan-tsz T'an). Rocks jut into the river on both sides. When the stream is narrow in spring and winter, the current is furious. If junks can keep clear of this, they need not fear.

No. 318. (Here Lung-pao T'an). In summer and autumn a junk's helm is apt to be rendered helpless by whirlpools and capsize.

No. 321. Nasty chow-chow and whirls in summer and autumn.

No. 325. Ditto.

No. 326. A fable connected with a place five *li* off. (N.B.—In connection with this gorge, it may be mentioned that in A.D. 1823, a K'wei-chou Fu gentleman, named Li Pên-chung, gave over Tls. 10,000 to demolish or improve many of the worst of the above-mentioned rocks).

No. 341. 'If you strike Yen-yü, you go down at He Shih,' says the proverb. (See No. 359).

No. 353. Because Mêng Liang crossed with a ladder-like bridge. N.B.—This gorge, called Chü T'ang, means 'Great (*chü*) collection (*t'ang*) of Water.' Its ancient name was Hsi-ling. It is the key or gate to the 'Three Gorges.' Yen-yü Rock guards its mouth.

No. 359. Stated to be 200 (Chinese) feet round. It is prominent at low-water in winter, when over 1,000 feet (? round) appear. The rise and fall of the water is several hundred feet. The rock is like a horse. Hence the saying: 'When Yen-yü is large like a horse, you cannot descend Chü T'ang. When it is as large as a turtle, you cannot even peep at Chü T'ang.'

No. 360. (Here Pê-ti Shan). Its ancient name was Ch'ih-chia Ch'êng. A savage-looking hill.

A JOURNEY IN NORTH SZ CH'UAN.

As I have said before, at Fou-t'u Kwan, the road from Ch'ung-k'ing westwards separates into two branches; and, early in the month of June, I took the north-western road, which runs for a few miles within view of the Hoh Chou River. Looking down as we descended from the rock, we obtained a most glorious view. There was the dangerous gate of Shih-mên-'rh almost covered by the muddy waters, and forming a strong contrast with its winter aspect, when it stands high out of the clear and limpid current. The hills on the left bank were bathed in fleecy clouds, intervals between which gave play to the brilliant rays of the rising sun. The *pa-tsz*, or 'plain,' which extends in labyrinthian undulations up to the range of hills of which Ko-lo Shan is the most prominent, was literally reeking with richness. The dull and leaden aspect of the paddy-fields was now changed into a green freshness, as the transplanted shoots had grown sufficiently tall to hide the water from the eye. With the exception of the four feet of stone road, not an inch of vacant ground was to be seen. The dividing ridges were covered both above and down the sides with 'yellow' and 'green' beans. Tobacco in huge worm-

eaten leaves; maize already shewing its red hairy-looking efflorescence; spinach, Barbadoes millet, pea-nuts (*Arachis hypogaea*), and a sort of parsnip or potato called *niu wei shao*, or *peh shoh*, or *shan yü*, occupied those patches of land which were not taken up by rice. Numerous little birds cheerfully sang in the summer, and, to add to the bucolic and classical illusion, the rustics wore garlands of peach-leaves round their heads,—with the purely practical object of keeping them cool. Bamboos, *wu-t'ung*,* (*Sterculia platanifolia*), cedars, willows, (*yang liu*, ? *Salix communis*, and *ma-liu*, of which I have a specimen), fig-trees (*hwang koh*), yews, firs, pines, all in fresh leaf, gave varied colour to the landscape. The *t'ung* trees were now in fruit, and innumerable wild flowers and berries enabled me to make a speedy collection, which I trust will some day come before the eyes of a botanist. Though it was very hot in the sun, I thoroughly enjoyed a walk under the protection of a quilted umbrella, and the light-hearted coolies relieved themselves with nasal snatches of celestial song. We stopped for tea at Siao-lung-k'an, a village 15 *li* from Fou-t'u, the entrance to which is under a notched and gnarled banyan which arches romantically across the road. I don't know whether it is that my nostrils are now becoming inured to powerful odours, or how, but I perceived no stench at all from the paddy fields, nor was my pleasure marred by the spectacle or smell of any of those pits or receptacles which are such a distinguishing feature of Foochow and Shanghai rurality. The *yang ch'üo*† or *kwei ku yang*, which utters a treble note in the form of three whistles, the middle one of which is an octave higher than the other two, defied all my efforts to get a glimpse of him. The only new tree was the *chieh-kuh-tan* or 'bone-joining elixir,' a malodorous plant with long, pointed, willow-like leaves, used as a 'simple.' The road to the coal-mart of Ts'z-ch'i K'ou, where the river turns north, branches off to the north-west, whilst we skirt the brae of Ko-lo Shan, and mount painfully westwards up two miles of steps to Kan-tien-tsz, (1,200 feet above the sea), 45 *li* from Ch'ung-k'ing, and 30 from Fou-t'u.

After leaving Kau-tien-tsz, we get a glorious view of a very

* Not to be confused with the *t'ung* or *Aleurites*.

† Perhaps this is Williams' *Shuh chwang*, or 'Sz Ch'uan cuckoo.'

considerable plain (for Sz Ch'uan) called *Hia-pa*, and shortly afterwards find ourselves in the valley, where the road again divides, the western branch running to Pih-shan Hien, and ours north-west, bisecting the plain, to T'u-t'u Ch'ang, beyond which it is called *Chung Pa*. Here my followers and the townsmen had a free fight, which appears to have arisen from the fact that the former were no longer in mourning for the Empress-Dowager, and that the latter were as yet unaware that the officials of Ch'ung-k'ing had two days ago resumed their red tassels. The appearance of a foreigner soon secured a deferential hearing. The accused person, whose meddlesomeness had caused the affray, and who appeared to be a *literatus*, went down on his knees, and I sentenced him on the spot to knock his head thrice upon the ground, or, on his pleading that it was dirty, upon my umbrella. The river which we crossed, or ought to have crossed, last month at Pê-shih Yih runs through this village, and we crossed it again at Sz T'ang, a mile further on. It is nothing more than a rocky cataract, which winds purposelessly about in this and the Pê-shih Yih plain, or *Shang Pa*. It joins the Hoh Chon River at a place called Pê-pei, 90 *li* from Ch'ung-k'ing.

Passing a village called Si-muh Kwan, we went on for another 15 *li* to Pa-t'ang Miao, a place which seemed to consist chiefly of a druggist's shop. The local Esculapius had a gentle and scholarly appearance with his spectacles over his nose, and, whilst refreshing myself with tea, I took the opportunity of putting him through his facings in respect to 'simples,' of which I had gathered not a few. The day was so hot that we all required more tea at Yen-k'an, a village half way up the hills at the other side of the plain, 100 *li* from Ch'ung-k'ing. Three more *li* brought us to Ch'ing-muh Kwan, (920 feet), a place where I succeeded in obtaining a tolerable, in place of a vile, inn by the simple expedient of making my fourteen bearers jointly responsible for my decent lodging. Wine-money at the rate of a penny a man a day, to be docked on each occasion that the inn is intolerable.

Leaving Ch'ing-muh Kwan, we proceed along a narrow valley, which is blocked up by a crenellated wall at the further end. Our road branches into two before reaching the wall, through which one branch runs west to Pih-shan, (25 *li*), and the

other to T'ung-liang, (85 *li*), and Hoh-chou. The latter, which we follow, runs north-west after passing through the Siao Kwan,—the name given to the pass in question. The defence was thrown up in 1864, at the time when the Yün Nan opium rowdies were in revolt, and in possession of Pih-shan. At Wan-ch'ang K'ou—so-called from the saucer pottery which forms the greater part of the village—the T'ung-liang road separates from ours, which now runs due north, and we keep this course with but slight deviations throughout the day. There is a coal-mine at Wan-ch'ang K'ou, the entrance to which is quite close to the road. The country gradually becomes more uneven and rocky, and maize shares with paddy the possession of the soil. The other crops as before, with the addition of taros, buck-wheat, and French beans, (*sz-chi tou*, short flat, and curved, and *chiang tou*, long, coarse, and baggy). I noticed no new trees the whole day, but I again secured a very rich collection of wild flowers. We met singularly little traffic on the road, and passed comparatively few farm-houses. Twenty *li* further on, after passing Wên-t'ang Yih, or Luh T'ang, a road again branches off to a place 30 *li* distant called Chiu-hien Ch'ang, or the "Old City Market," which appears to have been the seat of a District Magistrate under the Ming dynasty. Wa-tien-tsz is 35, and Ch'i T'ang 45 *li* from Ch'ing-muh Kwan. I forgot to say that one of the two bridges at this last place forms the boundary between the Pa Hien and Pih-shan Hien territories. The day was broiling hot, and I was consequently glad to put up with very indifferent accommodation at Pah-t'ang, only 65 *li* from Ch'ing-muh Kwan. The way in which these chair-bearers will carry you briskly along, up and down long flights of steps, in a broiling sun, with the thermometer at 90 degrees in the shade, is really marvellous. Their capacity for enduring discomfort ought to make the Chinese the best soldiers in the world. The labourers and rustics along the road were all engaged in a process called *kaoing* the rice; that is, treading down the outer or weakly shoots in each bunch, together with any weeds there may be. We are now in a region where it evidently pays better to get salt from Hoh Chou than from Ch'ung-k'ing. Porters carrying loads of Shê-hung pan-salt, worth 28 cash the catty at Hoh Chou, and 32 at Ch'i-t'ang, were met coming from the north. We also met Shan

Si coolies with their masters' bedding on poles bound for Ch'ung-k'ing, the owners intending to carry on the drug trade there. The only place between Ch'i T'ang and Pah T'ang is Man-fu Ch'ang, where I presented the crowd with a copy of the *Home News*. After it had been carefully examined, one old man took pains to explain to me that not one of them could read it, whilst my coolie explained to him that it was a newspaper fashioned after the manner of the Shanghai *Shên Pao*, each paragraph of which pointed a moral or adorned a tale.

We had to mount in a north-easterly direction up to a pretty high pass after leaving Pah T'ang. It is called Fêng-ya, and forms the very appropriate boundary between Hoh Chou and Pih-shan Hien. We had a severe storm during the night, during or in consequence of which the aneroid barometer may have considerably varied; but, apart from that possibility, the pass is about 500 feet above the winter river at Ch'ung-k'ing, and 1,300 feet above the sea. The view from the summit or neck, as we descended into a wide undulating plain, was very striking and lovely. The night's rain had freshened everything up, (though, indeed, nothing but the air required freshening), and the eye could light on no spot which was not thick with verdure or foliage of some sort. The descent from Fêng-ya is not immediate. First the road skirts the heights, and winds through a sort of elevated pass, of which the sides are, however, anything but what would be called mountainous. The only place after this of anything like importance—in a very humble sense—is Shih T'ang, where I found the dark, black, and grimy 'parlour' a very grateful retreat from the sun's rays, which a better room would have not been to so complete a degree. The distances for the day are Fêng-ya 10 *li*, Shih T'ang 30 *li*, Hoh Chou 20 *li*, sixty in all. Just before coming in sight of Hoh Chou, I caught sight of the river which runs down from T'ung-liang Hien and Chiu Hien, forty *li* apart. It is said to be navigable a good way above T'ung-liang, and joins the Shê-hung River five *li* above Hoh Chou. The word *T'ang*, so often used in the course of the past three days' journey, signifies 'stage' of 20 or 25 *li*, and at each stage there are or should be a row of from three to five conical *tan*, or mortar pillars, such as one sees so often all over China.

Hoh Chou I have already described, when I saw it under different conditions in the winter. The river had, early in June, covered all the exposed bank on which the shipbuilding took place in February, and had reached almost to the bottom of the steep flight of steps which leads to the Gate. I was favourably impressed with the town as I rode through in my chair, and I should be disposed to rank it above Lu Chou in everything but size. It is also decidedly cleaner than Ch'ung-k'ing, or even than any other town I have as yet seen in Sz Ch'uan, except, perhaps, K'wei-chou Fu.

Our road from Hoh Chou towards Sui-ning Hien was a direct cut to the north-west. We had already had to cross the T'ung-ch'uan River once on arrival opposite Hoh Chou, and we now had to cross it again where it turns west at Chao-chia Tu, and once more where it turns south at Pê-sha, 15 *li* from Ho Chou, after which we followed the left bank for fifteen more *li* as far as Wei T'o, where we leave it and cut across a bend for 40 *li* as far as the large market-town of Ta-ho Pa, 70 *li* from Hoh Chou. There is nothing of special interest to be noted on the road, which, between Pê-sha and Wei T'o, degenerates into a mere bridle path along the sandy bank. Maize is more common than rice, owing to the comparative steepness of the undulations. Brinjals and tobacco, together with the vegetables previously specified, are the other crops. Some of last year's (or perhaps the winter and spring crop) tobacco was being aired and dried on the shore, under a sort of low shed made out of mats, to the top of which the leaves were suspended in valance-like rows. Tobacco in these parts is usually brought to market in bundles about the size of a besom.

Tobacco seems to be most extensively cultivated in the neighbourhood of Ch'êng-tu. The largest quantity, and this made up chiefly if not entirely as *sz yen* or 'cut tobacco,' comes from P'i Hien, where the use of oil-cake manure (*yu k'u tsz*) is most advantageously pursued. Its usual price at Ch'ung-k'ing is about 110 to 120 cash the catty, or 80 cash in the leaf. There are, however, three qualities, the *ta* (great), *êrh* (second), and *chüoh* (foot, or lowest); but the last named does not come to Ch'ung-k'ing. The prices of the two others in August 1881 were Tls. 13.2 and Tls. 10 the 100 catties at Ch'ung-k'ing. The best tobacco comes from

Kin-t'ang Hien, and, it is said, would, if properly dried with fire instead of in the sun, compete successfully with any in the world. Its colour is good, and its flavour soft and mellow. The usual price at Ch'ung-k'ing is about 160 cash the catty. This tobacco is done up in open bundles (*k'un*) of from 30 to 40 catties, only one-fifth the size of the P'i Hien bundles. A third kind comes from Shih-fang Hien, but this is hotter and stronger than either of the other two, usually costing at Ch'ung-k'ing about 130 cash the catty. The bundles are about the same size as those from Kin-t'ang. The prices of all the above descriptions are often 25 per cent. higher in the late autumn than when the new crop has just been gathered. The statements of the Shanghai Delegates made in 1869 regarding the tares are corroborated with unimportant discrepancies at the present day. The hong scale is 16 ounces and $\frac{3}{10}$ to the catty, and payments are made with discounts of *chiu k'ou chiu ch'i*, which is probably what the Delegates mean by Tls. 8.7.3 for Tls. 10. The wholesale prices of all these tobaccos vary very much with the time of the year. The new leaf from P'i Hien costs in May, at Ch'ung-k'ing, between Tls. 7 and Tls. 8 the pecul; in autumn from Tls. 9 to Tls. 11. But in some seasons it has gone up as high as Tls. 15.

The tobaccos from K'ü Hien (also chiefly *sz yen* or pressed and planed tobacco) and Ho Chou are known at Ch'ung-k'ing as *t'u* or 'local' tobaccos, and cost about 30 cash the catty in the leaf. Prepared and cut, there are three qualities, the *t'ou hwang* at 50 cash; the *êrh hwang* at 60 cash; and the *t'iao sz* at 130 cash the catty. The *t'u yen* is dry and yellow compared with the *p'i yen*, which is oily and dark inside.

The hong charges, according to my informants, somewhat differ from those given by the Delegates. The buyer is said to pay two mace the bale for certain tobaccos, and the seller one mace. This is called *san fên yung*, or '3 per cent charges.' A kind of tobacco (which does not make its appearance in Eastern Sz Ch'uan) called *nan-hwa yen*, grown from Kan Suh seed, is produced in Kien-ch'ang and Ch'ing-ch'i Hien, near the Tibetan frontiers. There was once a large trade in this tobacco with Ch'ung-k'ing, but now other and nearer places demand all that can be supplied thence.

The export of tobacco from Sz Ch'uan cannot be ranked amongst the first class items of trade. Hu Kwang (Hankow and Ch'ên Chou) appear to be the chief markets, and their combined import probably does not much exceed Tls. 400,000 a year, much of it being re-exported water-pipe tobacco. Snuff is imported entirely from Canton and Peking, probably in the first instance from abroad. The higher qualities fetch enormous fancy prices. Regular snuff-takers usually satisfy their appetite with a quantity of the coarser description, and 'top' the indulgence with a pinch or two of superior, just as dinner claret is topped with a glass of burgundy or *liqueur*. Water-pipe tobacco is said to be entirely imported into Sz Ch'uan from Lan Chou and Shen Si.

A considerable quantity of *sz yen* is also imported from Fu Kien. This, *(fu yen)*, and the tobacco known as *mien yen* from Mien Chou near Ch'êng-tu, are amongst the most expensive kinds of all, and fetch from 140 to 150 cash the catty.

A visible improvement in the deportment of the people took place as soon as we passed north of Hoh Chou. Certainly, they displayed some little curiosity at the rare spectacle of a foreigner in European attire; but their manner was quiet and even respectful, and they did not beset me in the inns to a disagreeable extent, even in places where fairs were going on. They very often rise from their seats when they see an official chair approaching, and even uncoil their queues, or remove their umbrella-like hats—which last movement is, I apprehend, rather intended to make way than to present an uncovered head; but, in the exceptional instances where these marks of civility were shewn, the actors often shewed unmistakable symptoms of discomfiture when they perceived that it was 'only a foreigner.'

I made the discovery of a novel industry to-day. I had several times noticed a man walking along country lanes, and, apparently purposelessly, blowing a small horn: it turned out that this instrument was the signal of a pig and cow gelder. I also made the agreeable acquaintance of a remedy against mosquitoes in the shape of paper ropes filled with ground 'land-eel' bones, sulphur, and sawdust, which, when lit, slowly smoulder and emit an odour which certainly keeps mosquitoes off, even in candle-light: these ropes are called *wên yen*, or 'mosquito smoke,' and remind

one of the *zanzare* pastilles of Venice. Another sort is made out of various kinds of *Artemisia*.

At Wei T'o I perceived a number of Man-tsz Tung in the rocks of the left bank. Some of them looked very old, and others much larger than any I had seen hitherto; but they were all unapproachable except with the aid of ladders, and most of the largest entrances were blocked up with stones. I have remarked so far that these caves are almost invariably situated near an important river junction, which would seem to point to the conclusion that they were 'royal residences' or 'capitals' of Man-tsz tribes; and, indeed, the great unwashed of that ilk could scarcely afford to hollow out a stone cave for each family. Near one of the caves was an inscription in the rock: 'The city-wall was built in Ch'êng-hwa's reign,' (A.D. 1465); but I failed to discover any signs of an ancient city in the neighbourhood. Very likely it refers to An-chü, a former district city, now belonging to T'ung-liang District, 30 *li* below Ta-ho Pa and 30 *li* above Wei T'o. As we cut across the bend which the river makes here, we did not see this place, nor the embouchure of the river which comes from Loh-chih and An-yoh. We saw no new trees to-day, and not so many of the sorts already observed; but I succeeded in adding another half dozen to my collection of wild flowers. There are some pretty severe climbs between Wei T'o and Lu-lung P'u, a tea-house 18 *li* from Wei T'o. From that point to a fine fig-tree, the next resting place, whence is obtained a fine view of the river and of Ta-ho Pa, the road is fairly level for Sz Ch'uan. From the tree down to the town is nominally 5 *li*, but in reality not more than a mile.

Above Hoh Chou the manners of the people are supposed to grow more frugal. A Christian photographer who was turning Tls. 20 a month at Hoh Chou, and who was next going to Kwang-an, said that there was no use in his going further north, as the people in that direction would not spend money. As the people I have hitherto travelled amongst in Sz Ch'uan themselves live like cattle and hostel me like a pig, I shudder to think what horrors are before me in the Spartan north. The inn at Ta-ho Pa was a sorry affair, drenched with piggy smells, and reminding me sorrowfully of its namesake at the foot of Kin Shan, where, true, I slept like a cow in a shippon, with twenty coolies in the same room a few feet

above me, but, anyhow, enjoyed the fresh air of nature. In spite of the extraordinary filthiness of the Chinese in their household arrangements, I feel bound to record the opinion that, miserable though their habitations are, they are at least ill-built enough to be perforce ventilated, and their atmosphere is not nearly so unwholesome as that of many a crowded London theatre.

At Ta-ho Pa I made my first acquaintance with Sz Ch'uan silk, —the yellow sort which abounds in the Pau-ning and Shun-k'ing Prefectures. At the inn there were also large numbers of coolies conveying loads of Tls. 1,000 in silver to Mien Chou for purchase of silk for the Ch'ung-k'ing trade. These loads are placed in the inn-keeper's chest at night, and somebody sleeps on the top; and the inn-keeper is responsible for losses which take place in his hotel. In a case where I was robbed myself, the inn-keeper was at once made by the authority to pay the value of the missing articles. But, indeed, there is great security for property in this Province, and I doubt if anywhere else in the world a simple unarmed coolie could travel 500 miles with £300 attached temptingly to the end of his pole. To return to the silk; the Chinese say that the worms which eat the *shui sang*, (lit. water mulberry), produce yellow, and those which eat the *tsz sang*, (lit. young mulberry), produce white silk; and that both colours are produced, and both trees eaten, in Kia-ting Prefecture; but this statement about the different mulberry leaves requires confirmation, and may be compared with others made by Chinese in Kwei Chou, if reference be made to a former chapter. The ordinary silk mulberry is simply *sang shu* or *kwang sang*. The *ye-sang*, *ma-sang*, and *shui-sang* are little used for silk. During the winter the eggs are, in this part, kept in the family wardrobe or strong-box; and, to use the native expression, are 'nourished by the perspiration in the clothes.' In the third moon, at the Ch'ing-ming Festival, they are taken out and kept in the bosom for a few days, after which they are placed on bamboo trays, and fed for forty days on mulberry leaves, being carefully tended all this time. They then proceed to crawl up on hedge-like sticks or stalks placed handy for that purpose, and, in two days, they, and the cocoons they have spun around themselves, are ready for boiling. A little potash is put in the water 'in order that the head of the worm may be found.' The silk I saw was *kwo-*

p'ên-sz, or silk which had had the benefit of two courses of water. The merchant said that eight cocoons went to the thread; that the water used was nearly but not quite boiling; and that most of his silk went to Shanghai. The 'books' which I saw hanging up for sale reminded me very much of the Japanese silks which I have seen unearthed from the recesses of Cutler Street and Fenchurch Street for inspection by the Manchester manufacturer and his portly broker; but the colour was darker and brighter. Each *tsz*, or twisted skein, weighed from six to eight ounces, and 10 *tsz* went to the *pa*: one hundred and sixty ounces make one *ch'êng*. The price on the spot was from 150 to 210 cash the ounce,—about the price of opium, (which, however, is much cheaper this year). It was market day at Ta-ho Pa, and a very brisk silk trade was being done; but I shall have more to say upon this anon.

Our course the next day was still north-west, perhaps a little more west. We followed the left bank of the T'ung-ch'uan River as far as Shih-hsing Ch'iao, 18 *li* from Ta-ho Pa, and crossed to the right bank at Sz-fang Pei, three *li* above Ye-mao Ch'i, 22 *li* from Shih-hsing Ch'iao. All the above places are in the District of P'êng-ch'i, 280 *li* distant, by a very difficult mountain road of four stages, from Sz-fang Pei. Directly we had crossed, we found ourselves in a cotton and tobacco country, the former crop just above ground, the latter almost ready for picking. Great quantities of an earlier crop were being stretched on light wicker frames and dried in the sun. I did not know until to-day that there were two sorts of taro; the *shui-yü*, which grows in the the slop-lands; and the *han-yü* which grows on the slopes. We now followed the right bank as far as Tsz-t'ung Chên, 30 *li* beyond Ye-mao Ch'i, passing, about half way, the boundary between P'êng-ch'i and Sui-ning, of which latter District Tsz-t'ung is a sub-district. Beyond this place the river takes two very sharp bends within the short space of a mile, forming the rapid of Kwan-tau Shih. We happened to arrive at the corner of the headland which commands a view of the bends just at the moment that two huge empty junks were descending. One nearly ran its fore-sweep foul of a large coal barge which was painfully ascending by another channel, and the other ran aground as it was turning a sharp corner. This headland is a place of some celebrity. All elevated points which

surmount dangers are semi-sacred in China; and in this case a colossal Buddha, sixty feet in height and forty in breadth, has been carved out of the solid rock. A seven-tiered roof, slanting backwards, and somewhat resembling that of Blakiston's Shih-pao Chai on the Upper Yang-tsze, covers in the Buddha, and forms a sort of telescope case for him. The sight of such a stupendous work slightly overawed my coolies, who performed a few obeisances. A larger Buddha, similar in other respects to this, is said to exist in Lo-shan District of Kia-ting Fu, and one very little smaller three *li* outside of Jung Hien near Tsz-liu Ching. We now entered upon a remarkable plain called Hia Pa, or Hsia-hsien Pa, which extends in all directions about two miles, and is almost literally 'as flat as a pancake,' a few hamlets and tombs only breaking the expanse. At this season of the year, it is nearly covered with cotton, and in the winter with the poppy and carrots. This region is noted also for its pea-nuts (*Arachis hypogæa*), which now occupied also no inconsiderable part of the plain. The native cotton is considered superior to that imported from Hankow, (generically called *Kwang-hwa*, *i.e.* Hu Kwang cotton), and was selling on the spot for over 300 cash the Chinese pound. Hu Kwang seeds have also been planted in Sui-ning District; but I could not distinguish the plant from the local *t'u-hwa*.

The cotton which is imported into Ch'ung-k'ing comes from seven places or centres. Shanghai and T'ung Chou in Kiang Su Province; Hwang-chou Fu, Kiang K'ou, Tung Shih, the Li or 'Inner' River (behind or north-east of Sha Shih), and Sha Shih; all in Hu Peh Province. The best description, *Chia-hsiang*, or 'home sort,' from Hwang Chou, the place whence most of the Sz Ch'uan importers hail, is known by the name of *Chien-chwang* or 'sturdy.' The next best comes from Shanghai, Kiang K'ou and T'ung Chou, and are about even in quality. The Li River and Tung Shih sorts also run even. The cotton from Sha Shih is the worst in quality. In all cases but that of Sha Shih the bales weigh about the same, that is 180 catties, or almost exactly two hundred-weight; the Sha Shih bale is about 20 catties lighter. The price of all kinds of cotton was in September 1880 from Tls. 5 to Tls. 6 a-bale dearer than towards the close of the year and the beginning of 1881. It is said that one of the chief reasons was

that the Shanghai market had been glutted in consequence of the small purchases made by the Tientsin traders, who were apprehensive of a war with Russia, and consequently slow to speculate. Every bale of cotton that passes the Custom House at K'wei-chou Fu has to pay Taels 0172 duty, and as much *likin*. On arrival at Ch'ung-k'ing every bale has to pay further seven candareens *octroi*, or *loti shui*. All cotton imported into Ch'ung-k'ing must be reported at, and sold in conformity with, the customs of the *hang*, or [cotton] guild, whose wholesale scale weighs $17\frac{2}{10}$ ounces to the catty. The buyer elects how many bales he will weigh from each parcel purchased, and is free, if he chooses, to weigh them all. Before weighing, the tare is removed, and the cotton alone is placed in the scale. A discount of from 4 per cent to 6 per cent is allowed when the credit does not exceed 6 months. The buyer has to pay the *hang* Taels 016 for each bale purchased, and the seller one per cent of the price received, which would amount to another two mace. In return the *hang* guarantees to the seller the quality of the silver (*ch'i mai chu*) two mace. The taxation and hong charges laid on each bale of cotton, from the time it passes K'wei Kwan to the time it reaches the consumer's hands, thus amount to about Tls. 08 a bale, or about five per cent on its cost price in Hu Peh and Kiang Su. Freight and charges on all kinds from Hankow to Ch'ung-k'ing come to about Tls. 5 the bale. The cotton thus sold by the importers (*tsz-hao*) to the dealers (*p'u-tsz*) at $17\frac{2}{10}$ ounces to the catty, is retailed by the latter to the scutchers (*t'an hwa*) at the rate of 18 ounces to the catty. The scutchers again retail it to the people for wadding or weaving purposes at the usual rate of 16 ounces to the catty. There is some difficulty however in ascertaining the custom regarding these variable scales.

The following were the importers' prices ruling at Ch'ung-k'ing at about the commencement of September, 1881:—

1. Chia-hsiang, equal to Tls. 17-18 the 100 catties.
2. Shanghai, equal to Tls. 19.0 the 100 catties.
3. Chiang K'ou and T'ung Chow, equal to Tls. 18.0 the 100 catties.
4. Li River and Tung Shih, equal to Tls. 17.0 the 100 catties.
5. Sha Shih, equal to Tls. 16-17 the 100 catties.

At the zodiacal term *Pai-lu* (about the eighth of September) great feasting and rejoicing takes place amongst the Ch'ung-k'ing cotton traders if it rains; for then, it is said, it will rain day after day, and the price of cotton rise: if, on the other hand, it does not rain, the rice pot is reversed, and no feasting takes place.

Cotton re-exported from Ch'ung-k'ing has to pay an export *likin* of Taels 0172 the bale, and the same amount again on passing or landing at Lu Chow. Cotton not deposited at Ch'ung-k'ing merely pays a transit duty of Tls. 009.

A considerable quantity of cotton is also grown in Sz Ch'uan. The best comes from Sui-ning, (where there is a market for it), Ta-tsu, She-hung, T'ung-liang, and An-yo, all a little to the north-west of Ch'ung-k'ing, but only in good years does this suffice for local consumption. The Sz Ch'uan market, which also supplies part of Yün Nan, is affected by the import of Burmese cotton into the latter province from Ava. The Burmese cotton is of longer fibre than the Chinese, but is not so warm. At present it is not found beyond Hwui-li Chou; but it is said that the Kwang Si roads into Yün Nan are once more being opened, which may explain the fact.

In the year 1856, and again in the year 1862, Surats were imported *vid* Shanghai into Ch'ung-k'ing, but they would not sell, as the material had not sufficient warmth.

The above account of the taxation on cotton is open to doubt. Some say that the taxation at I-ch'ang is 400 cash the bale, and the total exaction at K'wei Kwan Tls. 096. The discrepancy is considerable; but probably the Tls. 0172 previously alluded to is on the 100 catties, and *likin* may be more than double the regular duty.

Crossing a low range of red sandstone hills, we descended upon the market town of Shwang-chiang Chên, which, strange to say, is not built on the river, but half a mile away from it. Here we put up for the day, having made a very good 100 *li*. All the way from Kan-tien tsz, (where we took our first day's breakfast), the country has been remarkably red, and its mountainous aspect has given way to what may be better described as 'hilly.' From Hoh Chou, and, indeed, from a day's distance south of Hoh Chou, the hills have had a strange circular, telescoped appearance, and

sandstone has seemed gradually to soften into sand. The country has not been so plentifully wooded as south of and near to Ch'ung-k'ing; but, with the exception of pines and firs, which disappear with the mountains, there is little change in the nature of the trees. Mulberries grow more plentifully the farther north you go, and the *hwang-koh shu* grows larger. Perhaps the commonest tree of all is the *T'ung-tsz* (*Aleurites vernicia*) now in fruit in every possible situation. I succeeded in getting specimens, with flowers, of all trees but the *hwang-koh*. Our journey this day was a trifle more to the west, but, roundly speaking, still north-west. The boundary between Hoh Chou and P'êng-ch'i on the left bank is near the rapid of Kwa-fu T'an, about a mile to the south-east of Shih-hsing Ch'iao. At this spot I saw a sort of grey heron, which the Chinese called a *ch'ing chwang*. I saw no other wild fowl of any description whatever: man is much too thick in Eastern Sz Ch'uan to permit of birds finding a quiet spot. An unusual number of hemps attracted my attention, and I gathered specimens wherever I could. Yams and lotuses were the only other horticultural novelties for the day.

The stages to Sui-ning are Yao-chia Tien, 12 *li*; Hwang-chia Ch'iao, 25 *li*; and Sz-t'i P'u, 50 *li*; all from Shwang-chiang. At Yao-chia Tien, I was overtaken by a French priest, and we had a glass of port wine together on an ashpit,—much the cleanest handy spot, either inside or outside the hotel enclosure. For the first time I saw a field of saffron flowers, but withered, and waiting to be plucked up.

The chief centres of the safflower trade in Sz Ch'uan are the environs of Shun-k'ing and Kien Chou (near Ch'êng-tu), though other places produce the article in unimportant quantities. The total production of the above-named two centres in average years probably falls little short of Tls. 800,000 a year in value; and Shun-k'ing stands for about twice as much as Kien Chou. The superior or Shun-k'ing variety, called by the Shanghai Delegates *k'wai-tsz hwa*, was described to me as *p'ien-tsz hwa* or 'sliced saffron.' And of this there are two qualities, the *pê lu* or 'northern,' and the *nan lu* or 'southern,' of which the former excels the latter in both quantity and quality. After the 'heart' of the flower has been removed, the remainder is pounded in a trough,

or trodden upon by men in a sort of ditch; and the more completely it is pounded, the better is the quality: the yellow water is then allowed to drain off, and the sodden flowers are heaped up to dry. The next thing is to press the flowers in a machine, and carve them into slices or cakes, which weigh from one to one-and-a-half mace apiece. The customs of the Shun-k'ing trade are said to be simple and honourable. Brokers are employed both by the buyer and by the seller, who make their purchases from samples. The samples are weighed, boiled, and again washed clear of their 'yellow water.' They are once more boiled in potash water, and the colour is taken upon coarse paper pulp, with the aid of a blackish liquid obtained from a decoction of the *wu-mei*, or 'black plum:' this brings out the red colour, and the pulp is allowed to dry during a day upon the table, when the buyer can judge the quality of the dye. The best silver without deductions or discounts is alone used by the trade, and after the market (*p'an-tsz*) has been opened (*k'ai p'an*) no change is made in the price fixed for each quality during the season; but, according to the briskness or otherwise of demand, the 'scale' is raised or lowered. The first scale is always 105 catties actual for 100 catties nominal, and the price is fixed by a senior broker in conclave. The blocks of slices, weighing five catties each, are carefully packed in bags protected by oiled canvas. By the custom of the trade certain perquisites, called *hwo hwa* and *kwei hwa*, are allowed by the seller to the purchaser's servants, and the purchasing broker presents the samples *yang hwa* to the buyers. The whole of these perquisites together, which are perhaps distributed in a way not quite accurately described above, amount to about five catties the *pao*, or 2½ per cent. The sales at Shun k'ing used to average about 5,000 bags (*pao*) a year, each bag weighing as near as may be 200 catties. The highest prices within the past 10 years have been Tls. 60 per 100 catties, ordinary scale; but this year (1881) they were as low as Tls. 046 the catty, or Tls. 46 the 100 catties, at 130 the scale. The Shun-k'ing description is that most purchased by exporting merchants, for sale at Hankow, Shanghai and in Japan. About 400 bags were exported during the 1881 season.

The *k'o-tsz* or *chu-tsz hung-hwa*, from Kien Chou, is not, as stated by the Shanghai Delegates, made out of the heart of the

flower. The main difference between it and that of Shun-k'ing variety is that it is pulled about instead of being made up into slices; and consequently the lumps are irregular and the dye is coarser, and better suited for dying common cloth. On the other hand, the dye, though too much charged with 'yellow water,' is more lasting and tenacious. The price per 100 catties, is usually less by 10 per cent than that of Shun-k'ing.

Inferior sorts are grown, not only in Ho Nan, but also in Yün Nan and Hwui-li Chou Kien-ch'ang).

The greatest demand for safflower was about the years 1849-52, when the production at Shun-k'ing reached 7000 bags a year. But red aniline dyes [*p'in hung*], which, though less tenacious, are easier of manipulation, have largely replaced the safflower dye in Sz Ch'uan, especially in the case of red paper. Opium, too, which appears to spread everywhere in Sz Ch'uan, has taken its place as a spring crop.

I also got a specimen of the *pao-k'é-tsao* or 'crackling flea,' a tree which has been identified by some with the wax tree. A mile or two beyond Sz-t'i P'u, we passed a road running off west to P'êng-ch'i, 150 *li* from the spot in question. This road crosses the river at Lo-tsz T'o, 12 *li* away. There are 50 more *li* from Sz-t'i P'u to Sui-ning Hien, the chief places passed being T'ien-ch'ih Ch'iao, 18 *li* from the former, and Lung-fêng Ch'ang, 20 *li* from the latter. The last 20 *li* are over part of the celebrated Nan Pa, the second largest flat space in Sz Ch'uan. It is about 20 miles long north and south, by from four to eight broad, and in June is covered with cotton, sesame, Barbadoes millet, pea-nuts, and a drug, extensively cultivated here, called *pêh chih*, (? *Iris florentina*), of which I have secured flower, leaf, and root. They say that it does not matter much if the cotton gets little rain, unless this little positively dwindles to almost nothing: the soil is grey and sandy, and the country looks like a cross between the rustic environs of Shanghai and the western part of the Peking plain. The ground is never allowed any rest,—opium, carrots, beans, and *pêh chih* forming the winter crops. At Tsz-t'ung and Tu-ho Pa, where there was a good deal of Shanghai cotton, the latter was quoted at Tls. 18 to 19 the 100 catties, and native at Tls. 21. The chief trade of the river is, however, in coal upwards,

and salt downwards, grain going both ways according to ruling prices. At Hwang-kwo Shu, (a place already elsewhere described), on the Hoh Chou River, half way between Ch'ung-k'ing and Hoh Chou, and opposite Pê-pei above mentioned, a local picul (2,500 catties!) of coal costs about Tls. 3.5, or, say, two cash a catty at the wharf. Ten or a dozen men are required to drag the boat up to Sui-ning and Yang-tau Ch'i, each man receiving about 2,000 cash for the journey. The coal sells at the salt wells for about four cash the catty. The riverine population is largely supported by this clumsy trade, which, in accordance with Chinese principles, is calculated rather to distribute industry than to develop it. A certain number of monopoly Districts, Ch'ung-k'ing, (both banks), Chung Chou, Wan Hien, Nan-ch'uan, Fu Chou, &c., are obliged to consume a certain proportion of Little River salt; on the other hand, the wells could supply much more if the 'consumption routes' were left unfettered. P'êng-ch'i Hien also produces large quantities of salt, and supplies by overland carriage, for which 'myriads' of porters are required, Shun-k'ing Fu, Yo-ch'ih Hien, Kwang-an Chou, Ting-yüan Hien, Liang-shan Hien, P'êng Chou, Ta-chuh Hien, Jung-shan Hien, and K'ü Hien. The production of P'êng-ch'i is about 20,000 tons a year. Strange to say, Sui-ting Fu, above K'ü Hien, takes, *up* the river, the Tsz-liu Ching salt, which is also consumed in K'ai Hien, Tung-hiang Hien, and T'ai-p'ing Hien. The monopoly Districts which consume a proportion of Little River salt are also bound to consume a share of Great River salt.

Sui-ning is an important District, with 32 licentiates, and nearly Tls. 100,000 land-tax, counting all exactions. Like Shwang-chiang, it is situated half a mile away from the river. It is reported to be a dissolute town, but I found a most agreeable change in the manners and facial expression of the people. The native of Ch'ung-k'ing, and within 100 miles radius, is to my thinking one of the least pleasing specimens of the Chinese race. It was quite exhilarating to get amongst honest faces once more, and many were the pleasant running conversations I had at the tea-houses or with the rustics along the road. But, alas! it did not last long; in fact, it ended with the first market-town in Shê-hung District, a mile from the P'eng-ch'i boundary. After

leaving Sui-ning city we continued along the plain until we got into a region of *mao* grass, a sort of marshy junk which not even pigs will eat, but which is valuable for fuel. Shih-chi Sz is 20 *li* from the town, and, after breakfasting here, and holding a pleasant conversation with the robust old landlord, a man of 78 years of age (who remarried and begat at 63), crossed by ferries two *hao*, or semi-stagnant branches of the river running through the dank grass. Talking of old men, I noticed an unusual number of them about this time, and remarked also a hairiness and difference in facial type, which led me to surmise that the people belonged to the *lao pên*, or 'old stock,' a few isolated groups of which, (as, for instance, east of the Kung-t'an River), escaped the great massacre of the seventeenth century. But, no! they all insisted upon it that they or their ancestors came from Hu Kwang and Kiang Si; and, moreover, I listened in vain for traces of dialectic differences.

Having now described a two hundred mile circle round Ch'ung-k'ing, and passed along half-a-dozen radii, I find that in no quarter, (with the exception of purely local and rustic uncouthnesses), does the language vary sufficiently to deserve any separation into dialects, and over all this space the language differs in a very slight degree from that spoken at Hankow. The main points of difference are, (1) that the departing tone is the same in sound as that of the Foochow Dialect, (but this distinction from that of the Hankow Dialect would not be perceptible to persons only knowing the latter); (2) that the *é* vowel, which at Peking is in many cases in a transition state with *o*, has entirely disappeared, and given place to the Canton *e*: (3) that a final *g* is often placed after the syllables ending in *an*. But it *is* a dialect, and I hope to go into it at length on a future occasion, merely adding now that it differs on the whole less from the Hankow Dialect than the Tientsin Dialect does from that of Peking. Persons not regarding tones would consider that it differed much more; but with Chinese dialects tones are of great scientific, even though of small practical, importance as some insist.

Well, to return to our journey, we reached the inn of T'ang-chia Tien, 20 *li* from Shih-chi Sz, as we debarked after five *li* of a boat from the second ferry, and found ourselves once more on the left bank in P'êng-ch'i District. Jan-chia Tien is 12

li further on; and now the country becomes more hilly, and very much barer and less productive. We pass over the *ya-k'ou* or neck of Ts'ao-sz Ya, and look down upon another *pa-tsz*, or flat spit, around which the river bends, cultivated like those already described, and known as Ch'ang-p'ing Pa. We descend and traverse this, always in the same north-westerly direction, and in a short time come upon our first salt-wells. Then we pass under a 'virtuous' arch, over a remarkably picturesque roofed bridge which forms the boundary between P'êng-ch'i and Shê-hung, and enter the thriving town of Ch'ing-ch'i Tu, the place where, as I have said, the honest faces most abound, and beyond which they cease. I held a sort of reception whilst we were getting our things into the boat, and harangued the curious but good-tempered crowd. We crossed once more to the right bank, and made our way through a barren grassy jungle to a spot 10 *li* distant opposite Yung-tau Ch'i, where we again took boat for a mile up, and were finally deposited on the left bank both of the river, and of a creek running into it at Yang-tau Ch'i, the great salt region. This creek is crossed by a bridge of planks, supported by numerous strong stone piers, and is navigable some little distance up for small boats. The total salt production of Shê-hung Hien is about 30,000 tons a-year, of which Yang-ch'i Chên or Yang-tau Ch'i produces about 20,000, the precise figure for the latter being five *yin* a day. Each *yin* here consists of 50 *pao*, and each *pao*, of 160 nominal and 240 actual catties. I fortunately happened to come across the chief salt merchant, who is a very friendly man, and he showed me round both wells and boiling houses. He also showed me that the gross production of Tsz-liu Ching and Kung Ching together, pan-salt and granular, was 7,000 *yin* a-month, or 48,000 *yin* a-year; making allowance for local consumption and peculation, say, 85,000. A *yin*, on the average, there now consists of 10,000 catties, or 7½ tons; so that 600,000 tons may be safely put down as the gross annual production of the Fu-shun River.

The wells of the T'ung-ch'uan (*i.e.* variously, the Hoh Chou, Shê-hung, or Little) River are very insignificant affairs compared with those of Tsz-liu Ching. There is no natural fire or gas; they range only from 200 to 600 feet in depth; they are worked

entirely by two or three men apiece; their *han-t'ou* or degree of saltness only ranges from 5 to 20 per cent; and few of the wells yield more than a couple of buckets night and morning. Over the well stands a large wheel, something like a mammoth Chinese spinning-wheel, about ten feet in diameter and two feet across the 'tire-edge,' which is made like a treadmill or white-mouse wheel. The bamboo rope falls over the edge into the tiny well, and supports a valved bamboo bucket not more than two or three inches in diameter, and about thirty feet long, but not so highly finished, nor yet so strong as those at Tsz-liu Ching. When this has reached the bottom, it has to be 'jabbed' by gentle treads off and on against the slush below, which forces its way up drop by drop through the valve. Then two men walk round the wheel half a dozen times, and the tube is hauled up. The quality of the salt is better than that of Tsz-liu Ching; and, moreover, it is of snowy whiteness, to obtain which the *p'u-t'i* fruit (of which I obtained a fresh specimen) is in some way used. The value of the brine is about 400 cash the 100 catties, and few wells produce more than 100 catties each night and morning. No one sells the brine, but each boiler owns a dozen or more of wells. The piercing of the wells only takes a few months, and is done in much the same way as at Tsz-liu Ching. The coal is the chief expense in the manufacture, eight local *tou* of 50 catties each, at from 4 to 6 cash the catty, being required for each cake of 160 nominal (*i.e.* 240 actual) catties. The pans cost from Tls. 9 to Tls. 10 each; all come from Fêng-tu below Ch'ung-k'ing, and each pan makes on the average 40 cakes, the merchant considering that 400 cash wear and tear of the pan must be added to the cost of each cake. The iron is bought here as well as the use of the pans, (which are not very much larger or thicker than the very largest kitchen pans), and thus of course the boiler can sell the old iron. Then the *lekin* and charges of about 8 cash the catty in all, which (levied on 160 catties) make another 1,200 cash; besides which wages, oil, ropes, sticks, &c., in all bring up each cake of 160 official catties to about 4,500 cash, or nearly 30 cash the catty,—the selling price as far as Hoh Chou. The freight to Ch'ung-k'ing is 14,000 cash the *yin* of 8,000 (12,000) catties,—say 10 tons; which adds, with minor expenses, another two cash the catty; so that things would most evidently be worked

at a loss unless, as above explained, a spade (*i.e.* 240) was *not* called a spade (*i.e.* 160). The largest boilers only own 10 pans, and the majority but one or two. It is easy to estimate the riverine import of coal. Shê-hung produces 3,000 *yin* a year, or 150,000 packages, each requiring 400 catties of coal. But only half the salt above Yang-tao Ch'i is worked with coal; so that we may strike off 30,000 packages, and say 60,000,000 catties or 80,000,000 pounds of coal a year, almost exactly 50,000 tons. Roundly speaking, therefore, two pounds of coal are required for a pound of salt.

Crossing over the creek by the plank bridge, we traverse another flat expanse of jungle and cotton, and reach the village of P'u-chia Hao, 15 *li* from Yang-tao Ch'i, passing numerous salt wells and boiling houses on the way. Most of the cotton on this flat seems to be from Hu Kwang seed. We then again cross over in a ricketty old boat to the right bank at Wu-siang Ngai, and enter some more jungle. In a short time we come in sight of T'ai-ho Chên, 15 more *li*, a business place which bears much the same relation to Northern Sz Ch'uan that King-tê Chên does to Kiang Si. The whole aspect of the country has now changed, and the usual Red Basin configuration completely vanishes. Yellow sandstone, sandy soil, bald and woodless hills, flat plains at their feet between the bends of the river; these take the place of the red soil and wooded hills, the incessant crevasses and creeks, and the varied crops. Sorghum and cotton are now almost the only things to be seen besides the coarse grass. Both the country and the people with their houses begin to remind one of the North, and the atmosphere is fresh and cool. Before entering the very large town of T'ai-ho Chên, we pass a tremendous collection of black buildings, a sort of mixture between a theatre, a market, and a temple; the place seems, indeed, to be a vegetable market. I was fairly taken aback by the size and business-like look of T'ai-ho Chên. A new wall has of recent years been built of granite blocks, well fitted together, and very neat. It is about 20 feet high by 12 broad, and is paved with slabs of granite several inches thick. Though of course not so bulky as the walls of many an eastern Chinese city, it is certainly, taken all in all, amongst the most respectable I have ever seen in China, or, in fact, any-

where. The plain in which the town stands is so flat that it is very difficult to get a fair view of the whole town, or to form an estimate of the population; but I should think that, both in size and numbers, it exceeded Ch'ung-k'ing. I do not think there is in Ch'ung-k'ing any one street so long and well stocked as that I passed through at T'ai-ho Chên, and I only saw a fraction of the town. The importance of Ch'ung-k'ing seems to me to have been systematically exaggerated by all travellers, who have probably been misled by the reports of travelling Sz-ch'uanese who are inordinately proud of their filthy city, but most of its trade is simply like that of Hongkong, which has been of recent years laid by some at a stupendous figure; that is, full-laden ships stop there for a few hours, or, what is the same thing to Chinese, days. The actual trade is, I believe, very much indeed below that of any two of Hoh Chou, Fu Chou, and Lu Chou together. In very round numbers, £1,000,000 sterling of each of cotton, drugs, opium, piece-goods, and salt pass through and are transhipped; and that is all. Canton, besides, being quite as much a centre of distribution, is a hive of varied industry, whilst most of that which goes up and down to and from Ch'ung-k'ing passes Hankow first. In point of internal resources, I doubt if one-twentieth of the Canton wealth hoard could be found in Ch'ung-k'ing, and in refinement and civilization the latter is infinitely below the former.

Shen Si opium was advertised for sale in T'ai-ho Chên: silk and cotton, with native piece-goods, were the most valuable goods exposed, but there were quantities of iron and other metals, grass, and hemp cloths,—in fact of everything but foreign goods. The main street was much broader than any Ch'ung-k'ing street, and, besides, had covered causeways on each side equally broad. So far, I have never seen a single wheeled vehicle in Sz Ch'uan, and not very many mules and horses; certainly not one single donkey. A mile below this place, there is rather a serious rapid called Yang-chia T'an, where the river descends like a wedge between two shingly banks. Above, again, is an equally bad rapid called Lo-sz-ts'z. We pass over another cotton plain after leaving T'ai-ho Chên, and mount up to a rock (Mu-k'un Ya) above the rapid: then we follow the lower of two roads along the bank, and pass a

large number of salt wells. These are different from those at Yang-tao Ch'i in that they are worked by a pulley at the top of somewhat larger shears than the mere sticks used lower down. The fuel used is chiefly jungle grass, enormous stacks of which are piled up near the boiling houses. Salt could be distinctly seen oozing out of the soil like hoar-frost. In addition to using the well-water, the saltness of which was only 12 per cent., lumps of mud were placed in huge mud vats or cisterns, and slaked with fresh water, which filtered through a pipe below, and had an increased *han-t'ou* of 30 per cent. There was no waste here; the smoke from the furnace was conducted through another vat of mud bricks, and the mud furnace itself was taken to pieces and boiled down every few days, in order that every atom of salt might be got out of the business. Working night and day, the owner of the five pans, I saw, said he could raise two cakes, and that he consumed 8,000 cash worth of fuel in the operation. He had to get considerably over 5,000 cash for each cake of 240 catties in order not to be a loser,—that is, exactly a penny a catty, or about tenpence a stone. His other information agreed with that of my previous friend. I suspect, however, that he exaggerated the cost of his fuel under the impression that I was some official on the look-out for profits. We now once more left the river and cut across a barren piece of country, in which, however, were numerous walnut trees. This led us up a steep ascent to Shou-shih Ya, where an old woman suddenly flung herself on her knees before me, and begged for assistance, as she had no money wherewith to pay her travelling expenses back to Yo-ch'ih Hien, six days away. Remembering a similar case which, as narrated, turned out to be a feint, I cross-examined the old lady so closely that she burst into tears under the operation. It seems that she had stumped it all alone in order to bring some cloth to the market, and very probably had the proceeds in her pocket, or in some of the holes or rags of which she was outwardly composed. She estimated her expenses at from one and a penny three-farthings to two-pence and one sixteenth a day, as she would eat at least two 'cats' polls' a day, (*i.e.* two bowls of rice clapped tight into one). I accordingly ordered up 300 cash—about thirteen pence,—and begged the old woman to *man-man hwui-chia ch'ü*, or 'get her quietly home,' a duty which,

however, are subordinated to the more pressing one of counting the cash.

Descending from Shou-shih Ya, I observed to the left a remarkable stone, which resembled a huge grinning monkey squatting on its haunches and hands, and, strange coincidence, to-day we passed two men with live monkeys attached to leading strings. Just before reaching Shê-hung, we passed over a very strong and noble flat bridge of immense blocks of stone which spans a small river running up to Chin-shih Wan. The navigation of the T'ung-ch'uan River for the largest-sized junks ceases at T'ai-ho Chên: above that point the river is still a fine and noble stream, but there are numerous rapids and shallows which do not permit of much draught. Notwithstanding this, very comfortable looking craft, capable of carrying a ton or two of cargo, and perhaps 100 passengers, abound on the higher river. The aneroid (which must have gone up with the fine weather) makes Shê-hung Hien only 750 feet above the sea. But this must be at least 100 feet out. Shê-hung is a poor and bleak-looking place, inside and out, and in its surroundings. The silk in this part of the country, which I occasionally saw being wound off on to the wheel, looks a purer colour than that we saw at Ta-ho Pa: it is also done up in different skeins, and, instead of being twisted, is gathered in at one end, and neatly tied into a knot. It looks almost like the golden hair of a fair English child,—which brings me round to the subject of women. They decidedly improve the more north you get, and look more healthy, vigorous, and good-natured. Maternity and womanliness have never appeared to me so poorly idealized as in the hobbling, dirty, noisy, unwholesome women of interior China. Here, too, they have small feet, but not quite so painfully small as in more civilized spots. I have not as yet seen a single large Chinese female foot in Sz Ch'uan, and I am sure if I did I should fall in love with it,—there would be so much human nature in it,—whatever the face was like.

No salt comes from above Shê-hung town, at least to the west, the only trade of which is in silk, cotton, (native), and opium: the people look as haggard and miserable as their country. We followed the right bank of the River to Yang-chia Pa, passing on the way the boundary of San-t'ai Hien,—the District city of T'ung-

ch'uan Fu. The country gets more and more barren, and we see nothing but rush, brake, sorghum, and cotton. Healthy-looking rustics were flocking to the fair at Yang-chia Pa, with their poor simple wares, the total value of which for the day I should not place at above £100, including the silk. We leave the river for a short time after quitting Yang-chia Pa, to rejoin it, after crossing a pass, at Ma-i-tung, the most dangerous rapid on the river. Its configuration is not unlike that of the celebrated Yang-kwo Ch'i Rapid on the Kung-t'an River, but its depth and velocity is of course nothing like so overwhelming. We can now see the pagoda of T'ung-ch'uan Fu to the west-north-west, and, descending into the small flat plain in which it stands, we cross by the ferry a small river running past the south side of the city, and enter by the south gate. The small river in question is navigable up to Chung-kiang Hien, 120 *li*: indeed it is navigable for small boats up to Lo-kiang Hien; but, owing to the falling off of trade in that direction, this latter traffic has almost ceased. Cotton, silk, and opium are the chief productions of T'ung-ch'uan Fu, a Prefecture having under it the eight Districts of San-t'ai, Shê-hung, Yen-t'ing, Chung-kiang, Sui-ning, An-yo, Lo-chih, and P'êng-ch'i, and the Sub-prefecture of T'ai-ho Chên. Opium had been selling at 60 cash and 120 cash the ounce, fresh or dry respectively, and had been very plentiful; but, of course, it was too late in the season for me to see with my own eyes. But none of Hoh-chou, Sui-ning, nor Shê-hung produce anything like so much as Pa Hien or Yung-ch'uan. The quantity of cotton did not strike me so forcibly as that of the silk, which was hanging up in the shops, being hawked about the streets, and being carried into town by numerous rustics. Like that we had seen at Shê-hung, it was left free as taken off the wheel, with the exception that it was knotted near one end in order to keep it from ravelling. The price varied from 160 cash to 180 the ordinary ounce; but it was usually quoted at 210 to 250 cash the local ounce, being $\frac{1}{1}\frac{1}{6}$ of a catty containing 20 ounces instead of $\frac{1}{1}\frac{1}{6}$ of a catty containing 16. The local *tsz* or skein, as taken off the wheel, was usually about two ounces, but I bought a couple which only weighed two (local) ounces between them. The local *pu*, or 'book,' consists of 80 ordinary ounces. I witnessed the winding operations in several places. A woman sits on one

bar of a very simple oblong frame, just wide enough to contain her legs, and allow free movement. In the middle, running parallel with the long side of the frame, and equidistant from each of the short sides, is a treadle, about two feet long, and 6 inches broad, like a double pedal of a piano. Through the middle of this treadle runs a stick about three feet high, and as the woman plays with each foot, or rather each shod stump, upon the two sides of the treadle one after the other, of course the stick wags from side to side. To the top of the stick is affixed another stick about half as long as the frame, and running parallel with its long side. At the other end of this last-named stick is fastened the outer end of a zigzag piece of wood, or an iron crank, the inner end of which fits into a wooden roller about the size of a large bread roller. This roller is the axle-tree of a six-spoked wheel about two and a half feet in diameter. There is a double row of spokes, that is, six running out of each end of the axle, and each spoke is connected with the one opposite to it by a stick, these six sticks forming, so to speak, the felloe or tire of the wheel. So far, we see that the wheel is turned when the woman presses the treadle. At the woman's right hand (the wheel being at her left) is a small stove keeping almost on the boil a gallon or two of water, in an ordinary iron cooking-pan, two feet in diameter. The frame is prolonged so that one short side ends in a bar running over the middle of the pan, and on this bar is set another frame, (like a Bahl saw), having as its middle part a small roller, (usually divided off into two or three separated portions), of bamboo slips. In the lower part of the small frame, on the woman's side, are fixed two or three hooks, or two or three copper cash with suitable holes, (accordingly as the rollers and wheel carry off two or three skeins), and through these hooks or holes the woman inserts five cocoon threads selected from a bundle of several dozen which she holds in her other hand or keeps hanging to a counterbalancing chopstick. The thread of five strands thus brought through the hook or cash is then made fast to the small roller, which is a few inches to the woman's left of the hook or cash, and a few inches above. It is then brought over the roller and back on to the circumference of the large wheel, which, when revolved, of course turns the small rollers very rapidly, but, owing to their small size, with very little jerk upon the cocoons,

and the silk is wound on to the circumference of six felloe-spokes of the wheel. Every second or so one or more, or even all, of the strands forming the skein thread breaks, but the woman with great and almost invisible dexterity joins others on to those remaining attached which are themselves almost invisible. This joining is effected under the hook or cash, and therefore requires no pause to pass it through the hole, unless all five break together, when she must pass a new thread up the hole. The cocoons which are attached float promiscuously about with the others, or bob about, like fishes catching the rain, just under the hooks. The skeins are about three or four inches broad, and the same distance from each other. The way in which the silk is distributed over this breadth instead of becoming all ravelled in a narrow rope is ingenious in the extreme, and I will endeavour to describe it. At the other (that is not the crank) end of the axle is a prolongation about four inches beyond the spokes. This prolongation is a mere shade thicker than the rest of the axle, and is, moreover, roughened. Over this runs a wooden wheel or block about six inches in diameter, and three inches in tire thickness, the axis of which is at right angles to the axle of the great wheel. The roughness of the axle-prolongation causes this block wheel both to revolve and to bob slowly and gently, the first in a horizontal and the second in a perpendicular direction, and is, in fact, a rough application of the slanting cog principle. The axis of the block wheel in the shape of a stick runs up and supports a crutch-like top which is often carved in the fanciful form of a canary. The canary thus goes whizzing round, and both over and to either his head or tail is fastened by a nail a lath, the other end of which runs to and fro over a small bar running parallel to the long side of the large frame. The bird is really nothing more than a small crank. At intervals of four inches apart in the lath, are affixed tiny crutches about four inches high, having tops or hooks not more than an inch across. Through these tops the thread is made to run before it is attached to the large wheel; and as the tops move two or three inches from side to side in a direction across the felloe of the wheel, and parallel with its axle, of course the thread never remains in a straight line but is wound slightly diagonally. The whole machine, stove, pan, woman, and all, could easily be

carried by a strong man, the woman at one end of a pole and the miscellanies at the other. One quart (*shéng*) of cocoons produces about a local ounce and a quarter, (1½ oz. ordinary), of silk, and costs about 240 cash. Thus about 60 cash profit on each ounce comes of the labour, and a woman can wind off 6 or 7 ounces a day. The value of the woman is probably below that of her clothes, (women being cheap in Sz Ch'uan, and, I was told at Sui-ning, largely exported into Shen Si); but, anyhow, her labour is not worth more than 20 or 30 cash a day, whilst, as a matter of fact, the work being usually family work, no wages need as a rule be counted in at all. The only expense is a very trifling quantity of coal, and the cost of the machine, stove, and pan; all of which, except the last, are probably home-made. Thus 250 cash a day, one shilling, a very handsome income for a rustic family, may be earned by one woman during the short silk season. The water is not changed during the day, and but one pan is used,—of course in the cases under notice only.

T'ung-ch'uan Fu is a poor but (for China) not dilapidated town, perhaps four miles in circumference, with public buildings decidedly above the average. We left it by the east gate, and once more crossed by the ferry to the left bank of the (here called) 'Great' River, which is navigable up to Mien Chou (180 *li*) and Lung-an Fu. We made sixty *li* in a winding but generally north-easterly direction as far as Ch'iu-lin Yih, mounting gradually first 20 *li* to Kan-tien-tsz, (like its Ch'ung-k'ing namesake, 1,300 feet above the sea); then passing An-loh Ch'ang, 18 *li*, and after a descent, following up the left bank of a small stream which joins the 'Great' River (*i.e.* the Kia-ling, or Little River) opposite Yang-chia Pa. I did not notice this embouchure yesterday. Here I may mention that the water of the T'ung-ch'uan or Hoh Chou River is (at least at this time of the year) what the Chinese call 'black.' Even where it runs through the red sandstone country lower down, it does not appear to mix freely with the sand, like that of the Yangtsze, but looks a grayish yellow, and curdles in a streaky way. In the winter I found it as pure as crystal between Hoh Chou and Ch'ung-k'ing. The country is now more barren than ever, and sadly lacks water; the hills are deprived of their trees in most cases, except that a

few cedar-wood forests are left here and there. Rice, near the streams; a little cotton and sorghum; taros and beans: these were about the only vegetables; loquats, peaches, jujubes, and walnuts the occasional fruit trees. The people looked no poorer than around Ch'ung-k'ing, whilst their houses, chiefly of mud and thatch, as at Peking, were decidedly an improvement on slimy wood and leaky tiles. The people were respectful, not to say polite, and only evinced curiosity when in crowds. We met a good deal of salt, both *shui hwa* and *kwo-pa*, being carried from Nan-fung Sz and T'ien-pien Sz, and other places about 15 to 30 *li* off our road to the left. It appears that the T'ung-ch'uan city, and Lo-kiang, Tê-yang, and Tsz-t'ung Districts, are supplied by these wells with granular salt, whilst Chung-kiang Hien takes pan-salt. It is not allowed in Shê-hung. From the account given to me by an old wayfarer, the production is 'over a myriad a day,' which would make Tls. 4,000,000 a year. He added, however, that the production was not equal to that of T'ai-ho Chên, which, as we have seen, produces about 10,000 tons. Supposing that he meant over a myriad catties, say 10 tons a day, that would give at the utmost 4,000 tons a year, a much more likely figure. The selling price on the road (of the granular sort) was 26 cash a catty, (? of how many ounces). It was said by the old man to go in very large quantities to Han-chung Fu in Shen Si, and to have displaced thence the more expensive *chao yen* (the Hwai or Yang-chow salt) since the time of 'the wars.'*

Between An-lo Ch'ang and Ch'iu-lin, we passed on our left a picturesque hill called Sê-chiang Shan. I also met a man carrying three birds which he called *sha-ho-shang*, and which had the appearance of a cross between a thrush and a gosling, with cobalt-blue wings. The shape and size were of the thrush, the down and and colour of the gosling, and the wings that of the kingfisher. I had serious thoughts of buying them,—they were only a few hundred cash each;—but botanical cares take up so much time, that in this case I decided to let ornithological science go by. By the way, near Yang-tau Ch'i we met some rough and honest-look-fellows from Hoh Chou in Kan Suh, carrying down some fox skins

* Probably referring to the Shih Ta k'ai (T'ai-ping) rebellion.

for sale. A little to the north-east of T'ung-ch'uan, we also encountered some hunters carrying leopard skins and bones, (the latter for medicine), from the hills in the Kwang-yüan District. And, by the way, also about here, we saw some dull black-coloured birds like blackbirds, which the people called *niu shih pa*; and this also brings to my recollection that a number of apparently tame white egrets occupied groves near some of the villages.

Our next day's journey was through a poor, tame, and uninteresting country, of the common hill and dale type, past Hwangling Ya, 15 *li*; Kai-p'ai, 38 *li*; Yen-t'ing Hien, 60 *li*, to a tiny mountain village called Lin-shan P'u, (1,100 feet), 90 *li*; all counting from Ch'iu-lin. The boundary between the San-t'ai and Yen-t'ing districts is a mile or two west of Kai-p'ai. We kept for some distance along the left bank of a small mountain stream which joins, a mile above Yen-t'ing, a river running from Tsz-t'ung Hien, and is navigable for small coal-barges up to a market town called An-chia Ch'ang, 80 *li* from Yen-t'ing. Just below Yen-t'ing, another small mountain stream, passing the city, joins this river, which then runs south-west into the Shê-hung river opposite T'ai-ho Chên. After leaving Yen-t'ing, we followed first the right and then the left bank of the said stream, which is at this time but a ditch, but which, judging from its deep and sandy banks, is evidently at times a torrent. Yen-t'ing Hien is almost the poorest district in Sz-ch'uan, and only pays Tls. 3,000 land-tax, against Tls. 60,000 for San-t'ai. It has thirteen licentiates, against twenty for the former. The city is very tiny, the west end not being more than fifty yards across; it seemed as if we were entering a toy city. Perhaps it is a small half-mile long, but its area is largely taken up with mulberry-trees. My sudden descent upon this Liliputian city created a great sensation, and I was closely beset at windows, doors, ceilings, etc., by a curious but not in the least offensive crowd. From the earnest and eager way in which they scanned my face, it was evident that they had seen no sort of a foreigner before. The approach to the city is very beautiful, what with the smooth and graceful valley with its mulberry groves, and young crops; its mosque-like and other pagodas occupying striking sites on very picturesque hills; and its noble

six-arched bridge over the ditch which barely fills one arch. One end of the bridge runs into a ploughed field, which is dug out of a mountain side, and the other connects with a small by-path leading nowhere in particular. Possibly, when the freshets arise, the bridge is utilised. It is the first of its kind I have seen in China. It is flat, except that the middle part, two thirds of the whole, is raised three feet above the sides, and approached thence by handsome steps; this gives the bridge a most elegantly diversified look. It is all of stone, and must have cost at least Tls. 20,000. Yen-t'ing produces a superior opium of a more tasty description than the Ch'ung-k'ing kinds; the quantity is not large, but sufficient to form a small export; this year the crop was too dry. Silk is, however, the great staple, and plenty of it we saw in every stage. A man with cocoons said that they were worth 270 cash a quart (*shêng*), and that he could get 1½ ounces (local ounce)—say 360 cash worth—of silk from each *shêng*. Nearly all the silk from North Sz-ch'uan goes to Ch'ung-k'ing by land route, in order to avoid the *likin* at Hoh Chou. The silk-winding machines are not all of the same construction. One I saw to-day had four skeins and four rollers instead of three; the crank which turned the wheel had hanging to it a fork, like a clothes-peg, one end of which was attached by a cord to a split bamboo pole, which a man standing on one leg at the side of the frame kept pushing back with the other foot. The other end of the bamboo pole worked freely up and down another split bamboo stick, extending out slantingly from the frame to the ground. Instead of the 'canary' worked by a cog, a wooden barrel of open bars like a white-mouse wheel set on end was turned by a rough bit of endless rope which ran round the end of the axle of the wheel. The ingenuity and rough simplicity of the machine makes one smile, but I do not remember even in English machinery to have seen an endless strap used in this ingenious way with one end working horizontally and the other perpendicularly.

Yen-t'ing produces a considerable quantity of salt, which goes to Kiang-yu Hien and Lung-an Fu. An old man who seemed to know all about it said the wells were contiguous to those of San-t'ai, but that the latter place produced more salt in any one of its half-dozen well districts than Yen-t'ing did altogether; so that we

may assume that 1,000 tons a year are produced in Yen-t'ing. He said the wells of San-t'ai brought up white brine, which yielded fifty per cent. of salt; that mules from Mien Chou were used in pairs to haul up the buckets by means of a horizontal wheel; and that the wells would yield all day long, and needed no 'prodding' or 'jabbing.' The *likin* was one cash a catty both in San-t'ai and Yen-t'ing, and ten or twenty strings were taken a day;—information which accords with what has been said before. Grass was the only fuel, and some of the boilers has as many as twenty pans. The salt from San-t'ai went to the capital and to Han Chou, besides Lo-kiang, Chung-kiang, &c., and the exported salt was always pan-salt, the granular being consumed in T'ung-ch'uan alone. Each porter carrying salt was provided with a *likin* receipt which enabled him to trade without further exaction in any place where San-t'ai salt was allowed to circulate.

The rustics along this road, in addition to the ordinary *lung-ku-chê*, or endless wheel, used a very effective irrigating machine in the shape of a mat shovel-like bucket swung by two cords, each held by one of two persons standing at a distance of twelve feet apart. One (the shorter) cord passed through the top side of the bottom of the bucket, and the other through and across the mouth. This bucket, being dropped shovel-wise down into the water, is deftly brought up and turned, discharging each time about half a gallon in half a second. A man and his wife usually worked the affair, and, by way of preventing the bank from giving way with the wet, adopted the characteristically Chinese device of taking off their coats, and laying them on the top,—of course with no further damage than a washing. The hard-working peasant women, though not at all inviting, are an improvement on their slatternly and dishevelled sisters of the town. I have often spoken to Chinamen of all ranks about squeezing the feet, and I think there can be no doubt that, apart from all fanciful stories, the sound practical reason of the tenacity of custom is that it keeps women from gadding about. The idea is the same as the Japanese one of blackening the teeth and pulling out the eyebrows as soon as a woman exchanges the irregular life of the tea-house for the more prosy one of marriage; the only difference is that the Chinese woman never has her youthful 'fling'; indeed, her youth is the time of the greatest pain,

before the bones and nerves of the feet have got properly smashed up and deprived of sensibility.

The water of the mountain streams is most carefully husbanded; in one place I saw a very handsome and ingenious mole or dyke of solid granite, around and behind which the river could be conducted down a flight of steps to different levels. Rice and taros, (wherever there was water), sorghum, cotton, beans, cucumbers, &c., were the vegetables for the day; cedars, mulberries, *t'ung-tsz*, *hwang lien*, (I think a sort of willow), walnuts, &c., the chief trees.

T'ai-ho Chên is 120, and Tsz-t'ung Hien 180 *li* by land from the city of Yen-t'ing. As we approached Yen-t'ing from Ch'iu-lin, we passed several roads on our right, all running to Shê-hung. Just after leaving Yen-t'ing, the road divides into two, ours continuing north-east, and the other branch running north over a steep hill to Tsz-t'ung.

The place in Yen-t'ing (I should mention) which produces the salt is called Liang-ho K'ou.

I inquired for *Man-tsz Tung* as we approached Yen-t'ing, and was informed that there were none in the neighbourhood; but, instinct has now taught me where to expect these; and, on looking up, sure enough, there were two in the rock just above the junction of the streams. I have omitted to mention that we saw numerous fine specimens both before and after reaching Sui-ning, but they were too much like those I had already seen to make it worth while clambering up.

I heard a good deal of Mahometans from Sui-ning northwards; in fact, the military official of that city was himself a Moslem. An agreeable consequence of their presence in the district was that I was able to get some mutton to eat.

It is noteworthy that tobacco and hemp almost disappeared from the scene from the moment we left Sui-ning territory. In fact, we met many coolies travelling to Wên-kiang district, in order to purchase loads of the *hwo ma* hemp, which is said to be the chief production of that place.

An article of commerce in the silk districts is old cocoons, or *chien pa-tsz*, worth eighty cash the catty; or *sz t'ou*, the same cut up and prepared, which are sold for twenty cash the

ounce, and are used for making cords, and stuffing pillows, cushions, &c.

The next day's journey was through the same uninteresting country, without any change in the cultivation. Birds, however, were unusually numerous, some of the most beautiful being different kinds of *san tsa* or *shan cha*, certain of which almost resembled humming birds, and others small pheasants. Seen from the back, these latter were extremely broad, with white spots upon a brown ground; but, seen from the side, they looked as small as a swallow. Magpies, (some brown), crows, doves, pigeons, ravens, and egrets were very common; and one top-heavy bird with mauve wings upon a drab ground, with a large head and broad chest, moderately long bill, short legs, black eyes, and slow fly, left upon me the impression of a cross between a kingfisher and a sea-gull. The Chinese called it a *ch'ing chwang;* but it was certainly not the same sort of bird that we had seen near Ta-ho Pa, also called by that name.

We crossed the boundary of Nan-pu Hien a few *li* beyond Lin-shan P'u, passing Pi-shan Miao, 18 *li*; Fu-ts'un Yih, 12 *li*, this latter a *sub-division (*fên sz*) of Nan-pu; Hwa P'ai-lou, 8 *li*; Ch'in-fu Sz, 20 *li*; to Liu-tien Yih, (1,180 feet), 32 *li*; 90 *li* in all. The two last-named places are tiny market towns, the former as bustling during a fair as the latter was deserted in the absence of one. These Sz Ch'uan fairs remind one very strongly of the same gatherings in the out-of-the-way villages and towns in county Donegal. Here was the matron sitting astride of her bat-mule, (but of course without her husband in front of her,—a combination very scandalous to the Chinese mind—), encumbered with her band-boxes, wares, and day's provisions; pigs in pokes, baskets, attached to strings, or slung by the feet to a pole; a brace of pigeons, tails downwards, neatly jacketted and suspended at one end of a stick, and a long-legged Cochin-China fowl uncomfortably slung to the other. Silk, paper, tobacco, native cotton cloth, and yarn; oil, rough iron, and bamboo wares, all being bandied about with interminable squabbling and noise. Here, for the first time on this northern road, back-loads began to replace the usual carrying-pole;

* A sub-district (*fên hien*) is under a *hien ch'êng*; *fên sz* is under a *siin kien*.

and horses, mules, (from Mien Chou), and saddled oxen bore loads of heavy produce in company with their masters. Poor and unpolished though the villages are, they are frequently adorned with a gaily-coloured but tawdry pagoda or temple; a play-house, or a roofed bridge. The dirt is of a drier and less pungent description than that of the south, and the country assumes a parched and dusty look in some places, which recalls travelling in the neighbourhood of Peking. The vermin were terribly numerous at Lin-shan P'u, and I was awakened several times by the impatient groans of my retainers, who had to struggle not only with mosquitoes, but with various parasites. I complacently reflected that, as a Chinese general,—a quondam Imperial Commissioner,—had recently explained to me, I was one of those lucky ones who 'did not fear the bite,' a fact which presented itself to me the more forcibly in that I was ensconced within mosquito-curtains. Nevertheless, I felt remarkably lively about the skin. The gallant general put me up to a 'wrinkle' which he, as a similarly constituted fortunate one, had discovered when called for audience to Peking, the city *par excel'ence* of Norfolk-Howards. 'You have no occasion to get excited and rise from your couch: these creatures always make for the shoulder, and when a dozen or so have collected there, just give your bare shoulder a sharp turn on the bamboo pillow, when they will be crushed to death and rendered perfectly harmless.' At the moment I reflect upon the judiciousness of his Excellency's remarks, I witness five kindly loiterers in the inn-compound engaged in rapidly picking off the Norfolks from my mosquito-curtains, previous to hanging them up for another night's adventure. According to the coolie captain, they cannot walk upon blankets or woollen rugs, but it is evident that they can comfortably sleep there*, for now I see my blankets being subjected to the same operation.

Near Liu-tien Yih I noticed some bare-legged women working in the paddy-fields. My men said they were of Cantonese extraction, but they seemed to have no other reason to give for this opinion than the fact that their feet were not squeezed. They said they had observed the same thing in Lung-ch'ang and Jung-

* Hence the saying, 'as snug as a Norfold-Howard in a rug.'

ch'ang, (where, indeed, I have heard there are some old Cantonese immigrants), but I did not happen to come across any of them.

The regular land-taxation of Nan-pu is not heavy; but, what with extras, &c., it comes to Tls. 5,000 and over a year. A land-owner told me that each mace of silver counted as three quarts of rice, and each quart of rice as 215 cash; so that the peasant would really pay four times the nominal amount. Nothing could be more complicated than the land-tax of Sz-Chuan, which, nominally about the lightest, is, in reality, amongst the heaviest in the Empire. The Prefecture of Pao-ning Fu, *i.e.* Lang-chung Hien, Kwang-an Chou, &c., is chiefly supplied with salt from those wells of Nan-pu which are situated on the left bank of the Pao-ning river. I met a man who owned one. He said the brine was white, and of 1½ ounce saltness to the catty;—say eight per cent. The wells were, as at Tsz-liu Ching, (down to a certain depth), and Shê-hung, lined with cedar or cypress-tubes to keep out the 'male' water. According to his account, these tubes are constructed with great care, and enveloped in canvas, tied with bamboo and hemp, and strengthened with *t'ung* oil. The joints are made by prolonging one side of a tube and splicing it to the corresponding short side of that above or below. Sometimes a tube will have to be fished up and repaired after a year or two's use; at others it will last for forty years. The fuel used is chiefly grass; coal from Ts'ang-k'i (brought down the small river to Pao-ning) being very expensive. At Liu-tien the price of coal was seventeen and eighteen cash the catty, or £4 the ton; but of course it was only used for smith-work and other exceptional purposes. Opium of a good quality is grown in the district, but not enough for local consumption; nor will the paddy-lands support a crop of opium during the winter. Here, and in Yen-t'ing, the distinction between *t'ien*, (wet-land), and *t'u*, (slopes), has to be rigidly kept. Though cotton is grown in the district, Shanghai cotton still finds its way up here, and, in spite of the heavy freight, competes successfully with the local article.

The landlord at Liu-tien being an intelligent man, I took the opportunity of cross-questioning him on various subjects. It appears that, though go-betweens are in vogue in match-making, these are not female professionals, but relatives of one of the two

families, and that the girl's family usually proposes. Her outfit is left to the liberality of her family, the only things which are a *sine quâ non* of her trousseau being one large and two small tables, four benches, and a few humble wooden utensils. Three days after marriage, the pair spend three days with the girl's parents. The latter make no profit by a marriage, nor does the husband purchase his wife in any shape or form; her marriage being, on the contrary, usually a heavy expense to her parents. Guests invited to wedding and funeral feasts must bring a sum of money fixed by local custom, according to intimacy or propinquity. This sum is smaller in the country than in the town, where the host usually profits by the transaction. In my informant's village, the lowest sum for an ordinary friend is 120 cash; at Nan-pu city 400 cash. As to adoption. An elder or younger brother adopts one of the sons of a younger or elder brother, if the former is childless; and, in the event of there being only one son, the custom of *shwang t'iao*, or one husband having two wives, one to represent and bring forth for his father, and one to do the same for his uncle, exists under the homely appellation of 'borrowing a cock for eggs' (*chieh chi-kung chien tan*).

From Liu-pien, (or Liu-tien, I am not sure which), onwards in the same north-easterly direction, the country grows more mountainous, and, at the same time, opens out into broader expanses. I should be disposed to think that the country from T'ung-ch'uan to Pao-ning was a gradual slope or slightly inclined plateau, still retaining, however, the cut-up and channelled appearance so characteristic of Sz Ch'uan; but a whitish gray has now taken the place of red soil, and the country wears a more wintry garb. At Shê-hung I was told that several inches of snow had covered the ground on one occasion this last winter, and that this was no unusual phenomenon. After crossing one ridge, we passed a busy fair at the little town of Ta Ch'iao, (25 *li*), to which the country people were flocking, like bees, from every direction, some carrying grain and homespun, or leading pigs for sale, others just returning with a bit of fat pork hanging by a straw to the little finger. The pole had now quite disappeared, and even the grain crop was computed by the *pei*, or back-load. The custom here is for the landlord to receive about one third of

the autumn grain crop, and no *ya tien*, or lessee's deposit, is left with him, as around Ch'ung-k'ing. In bad years the reduction of rent is a matter of arrangement and liberality, governed by the chances of the tenant's leaving, if too hardly pressed: there is no established custom. The Magistrate of Nan-pu must be an energetic man, for in every village and hamlet we passed, and, in fact, on almost every portal or house, there were affixed numerous proclamations exhorting the people to virtue and industry, and explaining to them in easy rhyme how the mulberry and the cotton plant should be cultivated. The next village is Shih-tsz Ch'ang, 12 *li*, shortly after passing which we crossed a brook which evidently runs into the Pao-ning river somewhere below the prefectural city. This stream seemed to be full of fish, and both men and women were wading about with cast-nets in their hands. The large-footed women in the fields were no better looking than their sisters of the stumps, but I noticed that they were generally singing or exchanging banter with each other or the passers-by in a cheery way unknown to the miserable creatures who totter about in, or rather on, 'golden lilies.' I think I even saw one girl who was sitting astride of a cow engaged in the occupation of flirting. Her back was turned towards me, but a young fellow was standing opposite to her and looking smilingly into her eyes; when he saw me, he dropped his smile and looked as solemn as a sexton, as though caught in a shameful act, little thinking that all my sympathies were with human nature, and not with the rites and ceremonies of unbending Confucius.

At the ridge of Siao-Ho Ya, (1,100 ft.), we passed the eastern boundary of Nan-pu, and entered the District of Lang-chung. Here a fine new temple had just been built by a local family of substance, and here the village boys were shrieking out their lessons at the top of their voices. Education seems widely diffused in Eastern and Northern Sz Ch'uan, but does not appear to go much beyond the three R's, or their Chinese equivalent. Most people seem rather ashamed of the fact, or bashful to shew that they have any learning, and it is exceptional to find a man who can (or will) tell you the written name of an official or a place. Yet crowds stand round the proclamations, spelling out their meaning, whilst the reception of a letter by a rustic Ajax is quite

an event, and collects quite a crowd of curious dunces, who puzzle out a character each here and there over the recipient's shoulder, until some Thersites condescends to interpret it in a lump. 'An old lady's ears are supererogatory appendages' (*lau t'ai-t'ai érh-to hü shê*), remarked my *fidus Achates*, (a sort of Chinese Sam Weller), meaning 'Luxury and learning are out of place in common people.' This gentleman hardly ever delivers himself of a sentiment without coupling it with some terse and homely proverb. 'It is in cutting the jungle that you find out the wolf' (*k'an lo hau-tsz hsüan ch'u lang*), he triumphantly remarked when I allowed some other person to buy me a skein of silk, and of course was cheated of a few cash.

We put up for the day at Wan-nien Ya, where we found a very tolerable and delightfully dark inn, having only accomplished sixty *li*. It was now scorching hot, though we had been singularly fortunate in having cool and sunless weather for a week past. The landlord of this place had one of the richest and most remarkably deep bass voices I ever heard,—quite astonishing in a Chinaman, whose utterances come seldom from the chest. The inn, however, it turned out, had one most serious defect: the mosquitoes were so numerous and pertinacious that not one of my bearers and servants got a wink of sleep, notwithstanding that they had carefully smoked the enemy out with straw before going to bed. I was more fortunate, inasmuch as I both smoked my room and had good curtains, whilst they each of them sweltered in a filthy appendage which looked more like an old sugar sack than anything else. Unfortunately, all our mosquito 'ropes' had run out, and, after four hours' refreshing sleep, I was awakened by groans of agony all around me: the unhappy coolies were making wild and desperate lunges at space and vainly endeavouring to snatch a moment's slumber. The end of it was, we all got up at three o'clock in the morning, and a very silent and unhappy lot we looked as we blundered along in the moonlight. I was rather glad to be able to get over the best part of the journey in the cool of the day, and discreetly kept to myself the fact that I had had a good sleep. It was still dark when we crossed the Si Ho at a trifurcated point called Si-ho T'ang, where the river, coming from Chia-ch'ao (in Nan-pu) and Ta Ch'iao, joins a small

stream running from a point 30 *li* in the Pao-ning direction, and the whole runs past Lau-wa Ch'i into the Kia-ling Kiang or Pao-ning (or Hoh Chou) River. By the way, I may mention that the T'ung-ch'uan River is called in the books by the name of Fu Kiang. It was barely light when we passed through the sleeping village of T'ien-kung Yüa 'rh, where the bankrupt inn was in official limbo. We breakfasted after a climb up a hill, (1,240 ft.), called Ch'ên-chia P'o, 20 *li* from Wan-nien Ya, and there witnessed some very amusing scenes between the silk-dealers and the villagers who were bringing in their skeins for sale. The amount of chaffering and indignation-acting which went on down to the last cent of the price, proved that no European merchant could ever possibly compete with a class of men who sell silk by the ounce and subdivide tenpence, (the cost of the ounce), into 200 fractions. The silk is weighed on a sort of steelyard, and I saw one lot of 73 ounces knocked down for 13,500 cash. The dealer was a crafty, covetous-looking man with one of his eyes drooping like that of a chameleon, and who (his mouth watering at the prospect of gain) spat freely into the face of everyone whom he addressed.

As stated by the Delegates of the Shanghai Chamber of Commerce, Kia-ting and Pao-ning are, (together however with Shun-k'ing), the most productive silk districts. The Kia-ting sort comes first in quantity, and, the silk being mostly white, takes the dye better. The fine silk, however, comes in larger quantities from Shun-k'ing and Pao-ning, where the yellow cocoons yield a thicker thread. The value of the combined production of the two latter prefectures is estimated by competent native authorities at from one million to one million and a half of taels a year, against from two to three millions for Kia-ting. The same authority estimates the production of Jên-shou, where the silk is celebrated for its superior quality, at Tls. 200,000 a year. As the Delegates observe, however, most places in Sz Ch'uan produce silk for local consumption, and the places named are only centres whence considerable export takes place. Little or none is produced in Jung-ch'ang or Lung-ch'ang; little, again, in Nan-ch'uan, and only 'mountain silk' in K'i-kiang. But most places have a little. In the small district of Pi-shan, for instance, there is a production of from Tls. 10,000 to Tls. 20,000 worth of silk in the year. The whole busi-

ness is transacted in twenty successive days at twenty different *ch'ang* or market towns. The export of Sz Ch'uan silk was, until within the last two years, carried on almost entirely by land, in order to avoid the heavy taxes at K'wei Kwan; but now much of it goes under transit pass. It is carried either to Hankow, or, by way of Shih-nan, to Sha-shih, whence it travels *viâ* Sui-ting and Tung-hsiang, or *viâ* King-mên and Fan-ch'êng, to Peking and the north generally. A certain quantity also goes to Peking from Ch'êng-tu by the great Shen Si road, travelled by Richthofen. From Hankow the silk is carried on by steamer to Shanghai, and thence to Soochow, where it is often dyed and sold as Soochow fabric. Dyeing silk used to be done much better both at Peking and Soochow than in Sz Ch'uan; but now dyeing is extensively carried on with aniline dyes, more especially at Chêng-tu. One regular customer, a large foreign firm in Shanghai, is said to have bought in some years as much as a million taels worth of Sz Ch'uan silk. The trade with Canton, which place formerly took 600 to 700 boxes a year, has dropped; but both the *hwo-sz* and the *shui chang sz*, mentioned by the Shanghai Delegates of the Chamber of Commerce, have resumed their place in the export to Yün Nan, which Province takes also large quantities of silk thread. Silk is also exported to Kwei Chou from Ch'ung-k'ing. The season covers the third and fourth moons, and is quite over in the fifth and sixth moons. The mulberry tree on the leaves of which the insects usually feed is ready for use the third year after planting. The leaves are plucked in the third and fourth moons, and the tree must be polled every year. During the first moon the trees have to be carefully examined by practised eyes to see if there are any grubs or moths upon the leaves, and these are instantly killed to prevent their eating up the tree. In Kia-ting the insects are frequently fed at first with the leaves of the *chê*, or silkworm oak, which resemble somewhat the leaves of the chrysanthemum. As they grow older, the diet is changed to mulberry leaves. This is 'hard silk,' and none of it is found in Pao-ning or Shun-k'ing. The insects which produce the wild silk of Kwei Chou are fed on the young leaves of the *Ch'ing Kang*, a species of *Quercus*. These two trees must therefore be closely allied. In Kwei Chou, however, the insects are more often fed upon the tree than in the

house, and the silk also is reeled off the insects as they are settled on the tree. The fabric made from the wild silk, or *shan-sz*, is also called *kê-ta ch'ou*, from the lumps and nodules which are found in its coarse texture.

The newly-hatched grubs must be fed daily with clipped leaves, and the leaves must be changed three times a-day. There must be no lime or dirt upon them, and they should be carefully wiped with a damp kerchief. Everything near the insects must be kept scrupulously clean. After ten days, they have grown to the size of a caterpillar, and developed their eight legs. When mulberry leaves have not been used from the beginning, this is the time for substituting them for the leaves of the silkworm oak. After a month, again, the insects begin to make nests on the stalks, (*shang chia*), form an egg around themselves, and begin to disgorge silk. As soon as they cease to move, they are removed from the branch.

A certain number of insects are allowed to live in order to produce eggs for the succeeding year. The grub comes out of the cocoon in the fourth moon, and lays its eggs upon sheets of paper provided for that purpose. These sheets are carefully placed in boxes, and hung up in a dry place in the house until the first month of the ensuing year. On the arrival of the solar term *ching chih*, or 'movement of larvae,' about March the 5th, the sheets of eggs are taken out of the boxes, and carried about in the hat or bosom, or placed among the bed-clothes in order to be hatched. Sometimes they are placed, instead, in a sort of large basket or sieve (*lo-tou*, or *shai-tsz*) which is kept in a warm place.

In washing the silk, or wetting it in order to wind it from the cocoons, the Chinese do not put potash and the caul of pips into the water, as has been supposed by some. These ingredients are, however, used to make silk glossy in the weaving. The term *Kwo-p'ên* is used to indicate silk which has undergone more than one washing, or in the washing of which more than one pan or basin is used. All silk must pass through at least one basin of water, so that the definition given by the Delegates of '*Kopun*, so-called from its passing through the basin in reeling' is hardly correct. As the Sz Ch'uan washers are paid according to the number of cocoons they can get through,—the rate being 80 cash the *tow*

or peck—no pains whatever are taken to keep the thread at a uniform thickness. Instead of taking up the ends of five cocoons, as is done by women in Soochow, the workmen frequently grasp as many as thirty. The water in which the cocoons are placed must be very hot, otherwise the insect changes into a moth. In the autumn of 1881 the Ch'ung-k'ing prices for silk were quoted as follows per ounce:—1.—Jên-shou and Mien-chou, one mace nine candareens. 2.—Pao-ning and Shun-k'ing, one mace three candareens for *t'iao-tsz*; one mace seven for (selected) *kai pa*; and one mace eight for *Kwo-p'ên*. The price of the harder silk from Kia-ting, which, however, does not come to Ch'ung-k'ing for export, was one mace six candareens. At Ch'ung-K'ing there is a silk *hang* or licensed exchange employing four families.

During the year 1880 silk was remarkably cheap, prices being as low as one mace one candareen the ounce. It has been as high as two, and even three mace within the last few years. About six years ago, for instance, it is said that a large French demand sent up prices to two mace five or six candareens. One hundred and sixty ounces of silk make a *pa* (book), and ten or more *pa* make a *tan* or pecul; but local custom varies.

A large number of *khatas* or yellow silk scarves (*p'a*) are also sent annually from Ch'êng-tu to Tibet, where they are used amongst the *lamas* (*huofo*) for ceremonious purposes. Pao-ning also sends *khatas*, *viâ* Kan Suh, into Tibet.

Coal was being conveyed on coolie-back from Pao-ning to Fu-ts'un Yih, where it was required for blacksmiths' work. The cost at Pao-ning was 400 cash, and at Fu-ts'un, say 80 miles off, 1,700-1,800 cash the 100 catties. The iron and tobacco consumed in Pao-ning come chiefly from Han-chung Fu, in Shen Si; but we also overtook porters carrying loads of tobacco from Mien Chou.

I was delighted to get hold of a good specimen with fruit of a very fine-grown small-leafed tree called the *hwang lien*, (not to be confused with the drug *huang lien*), which I hope to have identified. The cedars on this road have sometimes been allowed to grow to a great height and thickness; but the *hwang-kwo shu* got poorer with the country. We heard a great many real cuckoos about here; the local name is *pao-ku ch'üoh* or 'maize bird.'

Everything else in the way of nature was much the same, except that the country grew more mountainous, and the sandstone more decidedly white.

The only other place deserving the name of village on this side of Pao-ning was Ta-fung P'u, 15 *li* from the city. Pao-ning presents very little view as you approach it from the west. The Ch'êng-tu highway comes to an end with a flight of steps on the right bank of the river, whence we crossed by ferry boats to the suburb. The place, which has a reputation for great poverty, looked to me remarkably clean and prosperous, and in the high street through which we passed there were various foreign and Canton goods exposed for sale. Apart from its silk trade, Pao-ning is famous for its superior vinegar, many jars of which we met on the road, going to T'ung-chuan. It is, I understand, made of wheat fermented with rice-barm. There are a good many Mahometans in the city, and there is also a considerable quantity of Shen Si opium consumed there. It is hard; harder even than the Kwei Chou drug, and is sold in bricks of 100 ounces apiece. The price was quoted to me at Tls. 15-16 the brick. It is said to be better than any Sz Ch'uan opium, but not to equal in flavour that of Yün Nan. The coal consumed in Pao-ning and Nan-pu comes from Kwang-yüan Hien, up to which place the river is navigable for ordinary-sized cargo-boats, and above that for small lighters. Indeed, either the main river or one of its branches is navigable far into the Shen Si Province, notably up to Lo-yang Hien and Ning-kiang Chou. Iron, water-pipe tobacco, wine, sheepskins, felt hats, and coal are the chief products brought down; occasionally, also, cotton and foreign piece-goods are imported by way of the Han River. There was not much shipping lying off Pao-ning, nor did the interior of the city give one the idea of being much addicted to business. The *Yamêns* are exceptionally fine, that occupied by the Brigadier-General having been the palace of a *shwai* or generalissimo under the Ming Dynasty. According to trustworthy statements, Chang Hien-tsung, although he ravaged the country, never destroyed the city itself. Pao-ning is the official seat of the *Taotai* or Intendant of North Sz Ch'uan, who has jurisdiction over the three Prefectures of Pao-ning, Tung-ch'uan, and Shun-k'ing. It is also the seat of the Brigadier-General of the northern

marches, whose military jurisdiction is nearly, but not quite, conterminous with the civil. The Prefect of Pao-ning has jurisdiction over the Districts of Lang-chung, Nan-pu, Ts'ang-k'i, Kwang-yüan, Chao-hua, T'ung-kiang, and Nan-kiang, and over the Departments of Pa Chou and Kien Chou.

Leaving Pao-ning by the same ferry by which we arrived, we followed the shore of the right bank down to a point about a mile below the city where the river bends to the north. The river opposite Pao-ning runs east and west, and bends north on both sides, so that the city is built on a sort of low uvula formed by the tortuosities of the stream. We now cut across a fertile plain called Ch'i-li Pa, or 'Seven *li* Flat,' which abounds in tobacco, (*i.e.* not the water-pipe sort), cotton, beans, rice, sorghum, &c. A good many specimens of the *Pao-kê-tsao* or *Pê-lah* (white wax) tree grow about here. I am inclined to think from enquiries made that the former, though also called by the latter name, is not quite the same tree as the 'white wax tree' of Kia-ting, possibly a variety of the same species. The villagers near Pao-ning said so, and also said that no insects were there fed on the tree then before me. But a trader whom I met contradicted this, and his story is the more likely to be true in that a small quantity of white wax is undoubtedly produced at Sin-chên Pa, a Sub-district of Nan-pu on the left bank, and also at Fei-lung Ch'ang in Nan-ch'ung Hien, in both cases from insects brought annually from Kia-ting. *T'ung* trees were common, as indeed they have been over all the road from Ch'ung-k'ing. A persimmon (*Diospyros kaki*) tree was the only novelty; the bamboos, willows, cedars, and other trees, frequently above specified, being about as before. After travelling twenty *li* (very long ones) we again take the river bank, and, crossing a few troublesome hills, reach the village-town of Fang-lung Ch'ang, 25 *li* from Pao-ning. On the road we met vast quantities of native cloth being conveyed from Ting-yüan Hien, a District which produces a superior quality. The women in the T'ung-ch'uan and Pao-ning Prefectures are engaged with silk in the early summer, and, being too poor to indulge in the luxury of squeezed feet, work with the men in the paddy fields. Probably this accounts for so much cotton cloth being imported. Yet the old women and girls in the houses, here as elsewhere, were often

engaged in spinning yarn. The wheel is exceedingly rough and simple. In shape it resembles the silk-reeling wheel, and the woman sits with her right hand on a handle or crank which turns the wheel, holding in her left hanks of cotton, ginned and cleaned, about the length and breadth of a good-sized barley-sugar stick. The wheel is connected with and turns a spindle, whose axis runs parallel to that of the wheel. The end near and pointing to the woman's toes is prolonged and pointed like an awl. The end of the thread having been made fast to the spindle, of course it turns round many times faster than the wheel, whose circumference is so much greater. The woman serves out with her left hand, the fingers of which deftly regulate the supply, the hank she holds. The pressure upon the frail thread is not great at the point of the spindle; and, as the latter revolves, and the thread is carried farther back, it gets twisted and more capable of resisting pressure. Yet it frequently breaks, and is joined to the cotton hank by rubbing the two together between the fingers. Of course, such a rude method produces a very uneven thread, accounting for the coarse and fluffy appearance of Chinese cloth, which also has the defect of being woven narrow,—not more than 18 inches across. I was told foreign cloths were freely sold at Pao-ning, but that they were expensive. Yet I never noticed any in the shops or on the roads. Pao-ning and the country around is self-supplying in cotton when the year is good; otherwise it supplements itself from Shen Si and Ch'ung-k'ing.

Near Ch'ien-fang Ngai, 5 *li* beyond Fang-lung, were a number of gaily-painted and somewhat massive Buddhas, &c., carved out of the solid rock: the river takes an awkward bend opposite this place, and probably these effigies are intended to ward off disaster. One was being newly sculptured as we passed, and, really, the workmanship was far from contemptible.

The next objects of note were loads of bamboo fans of strong but coarse manufacture, being conveyed from Jung-shan Hien; also lamp-wick grass from Yoh-ch'ih Hien, and hempen-cloth from Lin-shui Hien. On the other hand, there seemed to be little or no traffic on the river, the dread of *likin* stations, in this case, as with the Shê-hung River, rendering these fine highways almost useless for many purposes. I noticed in one place a private proclamation

against the practice of female infanticide, but everybody from whom I enquired assured me that this practice was rare in Sz Ch'uan. Perhaps there is more than one reason. I have already alluded to the export of women to Shen Si. To-day several of my humble travelling companions regaled me with stories of the wholesale export of women by way of the Yang-tsze to Hankow, and various places in Hu Nan and Hu Peh. Perhaps, (though the men had never heard of Shanghai), they are destined for the numerous native brothels in that place. The traffic is clandestine, but is connived at by the police at certain *likin* stations, who charge a transit duty of 500 cash on each woman. In order to avoid detection at Ch'ung-k'ing, they are shipped lower down the river, and barracooned in dozens or half-dozens at Mu-tung or Fu Chou. That native-frequented brothels alone can have an interest in this objectionable traffic is evident from the fact that small-footed women fetch the highest prices,—from Tls. 10 to Tls. 30 a female. They speedily double, triple, and quadruple their value as they descend the Great River.* A little farther on we pass the boundary between the Lang-chung and Nan-pu Districts, into the territory of the latter of which we now enter for the second time. An ornithologist would have rather good opportunities about here. I have already mentioned some curious birds on the T'ung-ch'uan road. To-day we passed several of the rail kind which were quite unfamiliar to me. Also some of the small black diving birds, such as we had seen on the Sung-k'an River in Kwei Chou. I noticed one very pretty bird like a tiny black, or dark, neutral-tinted parrot with the head of a blackbird. The burr of a fine cock-pheasant roused a faint sportsman-like instinct within me. Cuckoos, (*pau-kuh ch'üð*), minahs, and daws were pretty common. We pass the village of Hè-shui T'ang in cutting across our fourth bend, at the Southern end of which is Lao-wa Ngai, our stage for the day. Nominally 45 *li*, it took us 7 hours of hard work, and recalled bitter experiences along the weary roads of Kwei Chou. From Pao-ning to Shun-k'ing there are nominally three stages, but they are notoriously long 280 *li*, and are known as the *man san chan* or 'three savage stages.' The ground enclosed between all these

* This account has since been twice officially confirmed in memorials sent to Peking by the Governor.

bends, for a mile or two from the river, is invariably flat, as was often the case along the Shê-hung River. Otherwise, in calibre and bank scenery, both these streams may be compared with the Fu-shun River, except that the rapids are of still less consequence.

Ten *li* beyond Lao-wa Ngai, the direct road to Shun-k'ing leaves the main-road, which takes a round to Nan-pu Hien, and rejoins it at Tsao-êrh-li, 15 *li* further on. As each side of the triangle is 15 *li*, that distance is therefore saved by avoiding Nan-pu. A few *li* further on we crossed the Si-ho, (the same river that we had crossed before daylight the morning succeeding our sleepless night), and, continuing our course due south, as it had consistently been hitherto, came to a remarkably handsome *p'ailou*, 'virtuous arch,' or portal in honour of chastity, where a road branches off to Si-ch'ung Hien, 120 *li* to the south-west. We are now quite out of sight of the Pao-ning River, and even of the channel in which it runs, although from the elevated points in our up-and-down zig-zag apology for a road we can occasionally obtain extensive views in all directions. The places passed *en route* are so insignificant as hardly to deserve naming; but we may select for that honour P'i-p'a Ch'ang, where we took a snack in the shape of some *t'ang yüan*, (or hot boiled *no-mi*, or glutinous-rice cakes), filled with coarse red sugar. Before crossing the Si-ho, we had passed a considerable number of the Nan-pu salt wells, which differ in little from those of Shê-hung Hien: perhaps they are smaller and meaner, but the yield of brine appears to be more generous, one or two wells, opposite which we stopped, furnishing six or seven loads a-day. We also passed one boiling shed, where there were a dozen pans at work evaporating *shui hwa* salt. The cost of the salt varied with the market from Tls. 9 to Tls. 12 the 100 catties; but the local salt catty has 120 instead of 16 ounces; so that 750 ordinary catties cost Tls. 10, or, say, 15,000 cash, just 20 cash a catty. The *likin* was 4½ cash the local catty, or about ⅔ of a cash for an ordinary catty. The fuel used was coal brought down on cow-back from Pao-ning. Most of the Nan-pu salt, however, comes from a place called Pei-wan-sz, on the other side of the river, about 30 *li* from Nan-pu Hien. We met coolies carrying this, or rather pan salt, into Shen Si, where it sells at very high prices, sometimes over 100 cash the catty. Three cash the *li* per

hundred catties, or, say, a halfpenny a mile a large hundredweight, is the rate paid: some of it goes in short stages, being passed on from hand to hand, and, in other cases, the porters pay their way along by selling portions of the salt. A remarkable feature in to-day's journey was the re-appearance in great numbers of the *ch'ang-kang*, or brushwood oak, which disappeared suddenly after Hoh Chou. The commonest road shrub all the way has been the *hwang chang*, a plant in process of identification.* We put up for the night at Chung-pa Ch'ang, 80 *li* from Lao-wa Ngai.

The next day's journey lay through the safflower country, now, however, planted chiefly with yams and other vegetables. Rice as a rule only occupied the bottom lands between the feet of the hills. Just before the commencement of the safflower season, the whole country is said to be one mass of red flowers, but at the present times it has a singularly bald appearance. The red telescope-pyramid type of hill replaces the less cultivated and scrubby yellow or white sandstone; the whole country far and wide has been denuded of nearly all trees except a few of the mulberry, *t'ung*, and bamboo; and the newly transplanted yam shoots, (*hung-shao têng 'rh*), are not sufficiently high to diversify the colour of the red ground. Yams are planted in furrows, and banked up like celery. Cotton was the most common crop after the yam. Men and women were engaged in *hauing* this latter, a process which, unlike the same term applied to paddy, may be translated by its English symphony 'hoeing.' In addition to this, clods of earth containing a plant were neatly dug out from spots where the seed had come up too thick, and reset in places where the seed had not come up at all. The young rice was everywhere now well on, and about 18 inches or two feet high, but as yet no grain ears had appeared. Sometimes, when paddy-land is insufficiently moistened by rain for rice, yams are planted there also.

A road runs from Chung-pa Ch'ang to Si-ch'ung, 90 *li* distant. Our route continues due south past Ma-ngan Ch'ang for 33 *li*, until we cross the frontier of Nan-pu and pass into the District of Nan-ch'ung, (the Prefectural District city of Shun-k'ing is Nan-ch'ung Hien); two *li* farther on is a small roadside inn, called Wa-tieu-tsz or Sin-ch'ang Ya, and, 15 *li* beyond this, the

* I find this is *Vitex negundo*.

lord deposit money at the rate of 1,000 cash an annual load, which at the Chinese rate of interest, would add another 100 cash at least to the 500.

The lopped mulberry trees along the road frequently had their short bare branches twisted together in a circle, the object of which was said to be to make the leaves grow. Those which grow after the 'silk month'—the 4th—appear to be of no use whatever, but still the tree has to be lopped in preparation for next year.

We cross a brook traversed by an exceedingly solid bridge on leaving Lu-ch'i P'u, and, once well in the country, meet a company of actors going to perform at Ma-an Ch'ang. We had, on our passage through that place, noticed that one of the theatrical pavilions with which almost every considerable village in North Sz Ch'uan seems provided, was in a state of preparation. They generally stand in the middle of a small square, and, with their tawdry surroundings, resemble not a little the shabby piazzas of modern Italy. These actors looked indeed a seedy and dissolute looking lot, as they straggled along the country road with their heavy trunks, coir bedding, shabby gilded and silvered spears, monkeys, puppy-dogs, and other histrionic appointments and pets; they looked as if they had mistaken the moon for the rising sun, and hurriedly dressed themselves out of the dirty clothes basket. At Kin-tê Ch'ang, 15 *li*, the morning rice was not yet steamed, and, as our luxurious coolies objected to bare boiled rice, we went on for early breakfast another 10 *li* to a roadside eating-house called T'u-ti Ya. Fuel is expensive in the neighbourhood of Shun-k'ing, as was evidenced from the fact that coarse grass was cultivated for cooking purposes. Some porters carrying coal from the direction of Shun-k'ing said that it came from a place called Lung-mên Ch'ang. The land now became more stony, and we crossed one long mound entirely composed of round stones. Near here we passed one of the most extensive and clean-looking farms I had yet seen in Sz Ch'uan. It was a *hwa-ch'ang* or 'saffron flower yard,' where the purchasers come to view samples, and to spend a few days in negotiations. The crop has been very good this year, and the price quoted to me in the city of Shun-k'ing was Tls. 58 the 100 catties, ordinary scale. Rice occupied nearly all the low valley here, and

all we saw of saffron was bundles of the withered stalks and bracts being carried away for fuel. Ten *li* further on, we passed through the village of King-ch'i Ho, beyond which a brook or small river runs tortuously into the Pao-ning River, six miles above Shun-k'ing city. The little river is crossed at King-ch'i by a splendid level bridge built of enormous slabs of stone, and ornamented, as is often the case in Sz Ch'uan, with dragon-heads on one side and tails on the other. Mounting gradually a hill (which bounds the valley on the south) to the height of 300 feet, we get a view of the Pao-ning River sweeping round from the north-east, and of the King-ch'i, or 'River King,' twining its way through the low-lands. From Wu-li T'ang, the top of the hill, to Shun-k'ing it is 20 *li*, and very soon the pagoda-protectors of the city come into view; the 20 *li* descent is very gradual, and the country of no special interest. We enter the suburb of Shun-k'ing at a gate quite close to the river, past which a small creek, (not navigable, running from Si-ch'ung), dammed up at the mouth, runs into the latter. As we went up the long and bustling street, we passed a marionette show, in which figures of painted wood or cardboard, transparent enough to show the colours through the light, were danced about from behind a sheet. No attempt at illusion was made. The spectators had only to pop their heads round the sheet to see the men handling the sticks and strings, and speaking in falsetto voices, with the orchestra of deafening instruments which always forms the accompaniment of Chinese shows.

Shun-k'ing Fu is a huge collection of shaky structures extending two miles along the right bank of the Kia-ling Kiang. It is chiefly famous for its saffron trade. Its salt comes from P'êng-ch'i, and its coal in boats from Pao-ning. The distances from Shun-k'ing are Si-ch'ung, 90; P'êng Chou, 120; P'êng-ch'i Hien, 120; Ting-yüan Hien, 220; Yung-shan Hien, 180; and Yoh-ch'ih Hien, 150 *li*. P'êng-ch'i is also 120 *li* from Si-ch'ung. Opposite Shun-k'ing, the river divides round a low marshy island, both branches being obstructed by rapids and shallows. In order to prevent the inner channel from undermining the city, which is bunded in quite close to the water, the expedient has this year been hit upon of casting baskets of heavy stones in the middle,

thus keeping the rapid current on the off-side and securing an anchorage and sluggish current for convenience of upward junks on the inner side. A great many thousand tons of stones must have been used, at an expense of, it was said, over Tls. 5,000. This is all very nice for the trading junks, (of which, by the way, there were very few moored off the city), but it is a very objectionable arrangement for persons wishing to cross the river. First of all we had to traverse the city to a ferry at the lower end of the *t'i* or mole; then we had to shoot out into the current and drift with the rapid, after which we crawled painfully up the shallows on the other bank and worked our way round the upper end of the marsh, again drifting across the further channel, and again labouring up to the ferry,—a most bungling arrangement.

The road to Yoh-ch'ih Hien is for 60 *li* a steady mount, with occasional dips, in a south-easterly direction as far as Fou-mên K'an, which is as nearly as possible 1,000 feet above Shun-k'ing. The places passed are Wa-tien-taz, 15, Siao-fên Ch'ang, 30, and Ch'ing-shui Ya, 45 *li*, all from Shun-k'ing. The country is mountainous, though tilled to the very tops of the hills, which are red, thinly wooded, and of the wavy pyramidal type hitherto noticed, except at the highest points, where their outline is bolder. The rice was coming on but poorly, and it was evident that the country was suffering from want of rain, which had not fallen in any quantity for some months. Cotton disappeared with the numerous little plains which we had crossed at intervals, almost all the way from Sui-ning round by T'ung-ch'uan and Pao-ning. I saw no tobacco; nor, in fact, anything but rice, sorghum, maize and pulse. The road is in excellent repair, as I half expected to find it, seeing that an official understrapper had particularly warned me the day before that it was execrable. The panoramas of the surrounding country, which one obtains from various points on the road, especially of the river as it runs both above and below Shun-k'ing, are superb. Crossing the neck of Fou-mên K'an, we get an equally superb prospect on the other side: scenery, true, monotonous, yet soft and expansive. We descend rapidly 12 *li* to Ch'ing-ch'i Ch'ang, where much grass-cloth, (*Boehmeria*), or the hemp of it, is produced, and where a fair was being held as we arrived. Just before entering the town, we pass the boundary-stone between

Nan-ch'ung and Yoh-ch'ih Districts. This place is the limit of the northern coal consumption, the small amount used in the forges coming from San-hwei *via* Yoh-ch'ih. Numerous porters laden with cotton-cloth for the north, such as we had met on the Pao-ning road, reminded us that we were entering a spinning district; and, sure enough, at our destination Hsin-lung Ch'ang, 27 *li* beyond Ch'ing-ch'i, almost every woman was at a spinning-wheel. The cloth was valued at 400-500 cash the piece of 32 feet. Other men were carrying cedar faggots to Shun-k'ing, where they sold at 5 cash for three sticks, together heavier than an Irishman's shillelagh. Coal, they said, was sold in the city for 12 cash the catty. On the road we overtook the marionette man whom we had seen the previous day. He was leisurely setting up his apparatus in a country village, and the local joskins and queans were sitting patiently on the steps of a joss-house, waiting until happiness should begin. Old ladies, washed and cleaned up for the occasion, hobbled in from the neighbouring hamlets, and looked quite homely and decent old bodies in their threadbare but well-scrubbed blue gowns. The marionettes are evidently usually played at night, as is plain from their local name of *têng-ying-rh*,—almost literally 'magic lantern.'

A man carrying four very superior-looking, large, iron cooking-pans, said they were made at a place called San-hwei in K'ü Hien, and that the iron was superior even to that of Fêng-tu. The pans cost over 700 cash each at the factory, over 800 at Kwang-an, and 1,100 at Shun-ki'ing, five days' journey off; that is, it pays a man to travel with four iron pans on his shoulders for five days for 1,600 cash, or, say, five shillings. Another bevy of porters were coming towards Shun-k'ing with saffron-flowers.

Just before entering Ch'ing-ch'i, we crossed a small river—evidently giving its name to the town,—which runs from Siao-fu Ch'ang to the Kia-ling River at Ch'i-t'ou Pa. We mount and descend 500 or 600 feet twice between Ch'ing-ch'i and Hsin-lung Ch'ang, passing across, in the intervening valley, another small stream, which runs from Hsien-tsz Shan and enters the Kia-ling at Ta-k'ou T'an. The last ridge or neck (almost always marked by a grateful and solitary *hwang-koh* tree) is called Sz-tsz Shan,

and from thence we discern the (at the distance) exceptionally picturesque market-town of Hsin-lung Ch'ang, our quarters for the night.

We made but a short stage next day to Yoh-ch'ih Hien, a District under the Prefecture of Shun-k'ing. The places passed were Kau-sên Ch'ang, 18 *li*, Lung-ya P'u, 15 *li*, the city being 19 *li* more. The country was hilly, abounded in fine views, and, generally, differed in no way from that of the previous day. Wheat (threshed) was selling on the roads for fifty cash the local *shêng*, (quart), of five catties;—say a trifle over a farthing a pound. Large quantities of writing paper, (*kou-lien*), were being conveyed from Lin-shui Hien to Shun-k'ing. The load of 80 catties consisted of thirty reams,* (*tao*), and was worth 200 cash the ream in Lin-shui. Cotton-spinning was going on at every house-door, and various kinds of hemp were being hawked about. The writing paper (made of bamboo) of Lin-shui is inferior to that of Kia-ting Fu. A root drug (? *Radix Ari Macrouri*) called *pan-hsia*, looking like round pellets of bone, and costing ten cash an ounce, was here and there drying in the sun, and I was told that K'ü Hien, some distance up the Sui-ting River, (which we are approaching), was famous for its parsnips† (*pai-sho*).

Yoh-ch'ih is 180 *li* from Ting-yüan, which place is 190 *li* from Kwang-an Chou.‡ It is chiefly noted for its large production of lampwick grass, enormous loads of which may be at any time met floating down the Yangtsze. The city is remarkable for its invisibility, being completely hidden from view both on its north and south sides. It appears to lie in a sunken portion of a small level plateau about 400 feet above the level of the Pao-ning River. Its population is enumerated at about 3,000 house-holders, and seven or eight people on the average are locally computed to herd in each dingy cot. The Magistrate's *Yamên* is exceptionally large and fine, and, as is often the case, its open frontage is used as a sort of exchange. By local custom, land-tax is paid at a large tea-house within the official grounds, where the tax-payer and the dun can haggle at their ease. There are eighteen licentiates allotted, (in-

* 100 sheets.

† The *chüeh pan shoh* is still another sort of parsnip (or peony root?).

‡ These distances do not tally with the maps.

cluding 'old' and 'newly increased'), to the District, which is a small and poor one. Some of the gentry told me that four per cent. was considered the usual annual return derivable out of landed property. Land-hunger is as much the passion of the Sz Ch'uanese as it is of the French peasant, and its gratification is usually preferred as an investment in life to a commercial or official career. The salt consumption of the District is partly P'êng-ch'i, (inland), and partly Tsz-liu Ching, (along the Sui-ting River), as is also the case with Kwang-an Chou. In leaving the town, we passed a very fine farm and homestead belonging to one of the gentry with whom I had been speaking the day before. The river which passes near the town is of no commercial use, and is only at certain times navigable for small boats as far as Ting-yüan. The road to Kwang-an is at present in very bad condition for the first ten miles at least, as it runs through uninteresting paddy-land. Towards Kwang-an Chou it is better, and at the same time much more hilly. The distance is 60 *li*, and the places passed are T'u-mên P'u, 10 *li*, Ta-shih Ch'iao, 20 *li*, a village just beyond the Yoh-ch'ih and Kwang-an boundary stone, 40 *li*, and Hwo-sên Miao, 50 *li* from Yoh-ch'ih and 10 *li* from Kwang-an. A short distance from the walls of Kwang-an, we crossed a small stream called Si-ch'i Ho, and passed through a village of the same name, where a great deal of cloth dyeing with indigo, and of smith's work in San-hwei iron, was going on. Coal appears to be cheap and of good quality. San-hwei, the place from which it comes, and which would seem to be the Glasgow of north-east Sz Ch'uan, is at the junction where two rivers, one from Pa Chou and the other from Sü-ting Fu, meet on their way down to Hoh Chou. A good deal of coal and iron-work was being conveyed to Yoh-ch'ih. Maize, beans, and a little tobacco of the kind called *liu-yek yen* or 'willow leaf,' and hemp, were, with rice and wick-grass, the chief crops in the ground. Shortly after passing the boundary stone, we branched off more to the east from another road to Lin-shui which is shorter by five *li*. In approaching Kwang-an by land, we descend somewhat suddenly from a pass, find ourselves in view of a very picturesquely situated town, just at a bend where the Sui-ting River, coming from the north, turns east. Below the city the river is rocky and very pretty, and a

number of large junks were moored under the walls. Ten *li* above the city is the most formidable rapid, said to be ten *li* in length, upon this river, and half-a-mile below the town the two other second-class rapids called the 'Ta' and 'Siao' Lung-taz; but, as the largest junks can go up to Sü-ting, none of the upper rapids can be of very much consequence. I have already described those below Hoh Chou. We follow the right bank for a couple of miles, and cross by a broad and handsome bridge the Si-ch'i Ho, which, after almost touching the west corner of Kwang-an city, takes a turn amongst the hills, and empties itself into the Sui-ting River here. We then cut across a bend, and once more sight the river at the small rapid of Kwan-tau Ch'i, 10 *li*, where the river runs through a sort of low rocky gate somewhat like a miniature Pa Hiah of the Upper Yangtaze. We then cut across another bend, and cross to the left bank at a spot five *li* from the large market-town of Kan-ch'i Ch'ang, 30 *li* from Kwang-an. The height of the river above the sea, according to one untested aneroid, is only 500 feet, or 300 feet lower than the Yang-taze,—an impossible result to be ascribed to the state of the weather; and Kan-ch'i Ch'ang is 350 feet above the river. We had hitherto been remarkably lucky with the weather, and, owing to the convenient absence of sun, I had passed most of the month of June in serge and flannels; indeed, it had several times been much hotter even in April; but to-day the heat was overpowering, so much so that one of the chair-coolies had to knock under with fever and ague. A number of inhabited timber rafts were floating past the ferry, and 'unsettled' opium was being hawked in the village for 80 cash the ounce. Coal of excellent quality, from near Liu-shui, was selling on the spot for 80 cash the man-load.

A tremendous thunderstorm ushered us out of Kan-ch'i Ch'ang, but at the same time gratefully cooled the air. We made 15 *li* to a village called Shih-chiao P'u, at the foot of a long range of hills known as Hwa-yung Shan, which is, according to our 'captain,' one and the same range with that which we crossed, after leaving Ch'ung-k'ing, at Kan-tien-taz. We then had to do 15 *li* of rather severe climbing to a village lying on the bank of a remarkable mountain lake called T'ien-ch'ih, the level of which is said never to change, and which communicates with a weird cave,

and comes out in the form of a river near Kan-ch'i Ch'ang. I saw neither, as I did not hear of them until too late. Owing to a bridge having become unsafe, we had to make a little excursion in boats across a corner of this lake, which reminded me somewhat of one of the higher Killarney Lakes, but, of course, the scenery was much inferior and less wooded, and the human beings entirely devoid of wit, beauty, or poetry. Ten *li* more of severe climbing brought us to a tiny plain in a sort of hollow which looked as though it also should have been a lake. This flat space was 2,000 feet above the river near Kan-ch'i Ch'ang. Near the top of the ridge, 300 feet higher, we passed the boundary stone between Kwang-an and Lin-shui, and, after mounting 40 feet more, we reached our highest point, and very soon commenced a descent. The highest spot traversed by the road is, apart from possible variations, about 3,000 feet above the sea level. From the moment we commenced our ascent, the mountain scenery had been beautiful: it was indeed the first genuine mountain scenery we had since leaving Ch'ung-k'ing. The rocks were calcareous (*yu kwang shih*), with nothing of sandstone in their composition. As we approached the top, the firs and pines, which we had not seen for so long, became commoner and commoner, until, at last, they were almost the only trees to be seen. The table-land at the top of the ridge is quite uncultivated, and is simply a grassy sward,—a refreshing but rare sight in China. Looking backward, we had already had some splendid views; there was a misty glamour on the side whence we had come, yet we could easily make out the river curving round from Kwang-an Chou to Kan-ch'i Ch'ang. On the other side the air was perfectly clear, and we had the most superb and extensive views. Our own range stretched away from the north-east to the south-west; and opposite to us, on the other side of the undulated valley, in which the city of Lin-shui Hien lay like a dot, were two other parallel ranges running in the same direction. Lin-shui did not look more than 10 *li* distant, but it was thirty-five. From this distance as a standard, it was evident that we could command a distinct and clear view of at least 50 miles in every direction except that whence we had come. Descending the mountain steps was very like coming down the Rock of Gibraltar, and we were very glad of a rest at

Lo-kwo P'u, 980 feet from the top, and still 20 *li* from Lin-shui.

Of the city of Lin-shui Hien it is unnecessary to say anything except that it is as dirty and uninteresting as all Sz Ch'uan cities that I have seen are. The people, however, seemed quiet and respectful. From the moment I started from Ch'ung-k'ing a sort of instinct made me look forward with horror to the prospect of crossing from Lin-shui to Ch'ung-k'ing. The open tunnel between two ranges of hills through which we were to swelter was to my imagination almost as painful an ordeal to pass as a miniature Desert of Sahara. My worst anticipations were realised. The sun shone with frightful force; the inns were small and dirty; the distances (100 *li* a day), long; and the coolies tired. There is no river, (at least I could not see any), at Lin-shui; but, shortly after leaving the city, we came in sight of a stream running past T'ai-lung Kang into the Yang-tsze. The first halt was at Mêng-chia Ch'ang, 35 *li*, a village which looked quite close the day before, as we surveyed the plain from the hill-top. Eight *li* beyond this, we crossed another stream running north and south, which was said to run into one of the greater rivers at T'ung-ching Kwan, under the Kiang-peh Sub-prefecture. A little further on, another stream joins it, and at this spot we had the pleasure of walking along half-a-mile of real river meadow, for all the world like that which one sees on the banks of English rivers,—for instance, at Hereford. Ho-liu Shui is 60 *li* from Lin-shui, and there we tried in vain to procure coolies at any price: 'they had never carried an official chair, and did not like the responsibility.' In order to relieve the exhausted coolies, therefore, I was obliged to do a good deal of plodding in the broiling sun,—a process the danger of which is, I think, much exaggerated, as long as you are airily clad, and thoroughly shaded and protected about the head. Eighteen *li* beyond this, we crossed a brook running from west to east, the steep rocky banks of which were thickly dotted with most interesting and extensive-looking Man-tsz Tung, the entrances to which did not seem, in the distance, to have any of that telescopic or fluted appearance hitherto so universal, but were cut quite sheer and plain. It was too hot, however, almost even to raise the eyes, let alone to think of scram-

bling up. A very long ten *li* farther on was Pé-yang Pa, simply one large house, fortunately with one tolerably habitable room in it. We must have made 110 *li* that day, as we turned in worn and weary at dusk. The next morning we resumed what must really be called our terrible journey, passing some more Man-tsz Tung at Ch'i-kung Ch'i, (15 *li*), and feeling already exhausted when we reached a small village, 5 *li* further on. We now seemed to be emerging from the tunnel as we mounted several hundred feet to the left, passing first Kau-shan Ch'ang, and then a road-side inn, (*yao tien tsz*), and crossed the unmarked boundary of Kiang-pêh T'ing at an altitude of about 2,000 feet, obtaining again, certainly, some most magnificent and extensive views. Things reached a climax at the market-town of Ts'z-chuh Lin, (1,500 feet), where a dense throng of dirty marketers beset the slimiest of inns. Here we succeeded with some difficulty in hiring a few men, and, after this, each coolie had his five *li* of plain walking to an alternate five *li* of carrying,—a great relief to the poor fellows indeed. The next stage of about 40 *li* to Shih-han Ya-'rh seemed interminable; but, at last, as evening was closing in, we reached our not so very execrable inn after a journey of 13 hours;—over 105 *li*. The country calls for no special remark, and, certainly, the people seemed everywhere quiet and orderly, contrary to the reputation usually borne by or officially given to the inhabitants of this Sub-prefecture. Next day, after making 27 *li*, we crossed, by a bridge, a river running south-west, and took our last tiffin at a market village called Liang-lu K'ou, (45 *li*), shortly after leaving which we came in sight of odious Ch'ung-k'ing, still 50 *li* away. Long before arriving at Liang-lu K'ou, we could make out the bend of the Yang-tsze at T'ang-chia T'o, about 30 *li* below Ch'ung-k'ing, but we could not see the river itself. Ten more *li* brought us to Hwang-kwo-p'ing, and 18 more to the considerable market-town of Ch'ên T'an on the Yang-tsze, near a rapid of that name. The inn was crowded with exhausted coolies, swabbing themselves with hot water, and swilling down tea or gruel. I must, however, again say a good word for those dark little dungeons of rooms, which are in every other sense so disgusting. They are decidedly the coolest places you can be in on a hot day. The twenty *li* along the river bank to Kiang-pêh T'ing was

perhaps the most painful part of our journey, as the road had got out of order, and we had to steer the chairs through boulders and brushwood. But the longest lane has a turning, and at last we were in boats, crossing without the slightest difficulty the mouth of the Hoh Chou River, which is protected from the Yang-tsze current by a corner of Ch'ung-k'ing which juts out over its entrance. This crossing is, however, extremely dangerous when the waters of the Hoh Chou River are high; and three days later, —the day after a serious attack on me by the populace,—three ferry boats of roughs, who came to bait the barbarian, were overturned on their return, and 40 persons were drowned.

NAN-CH'UAN AND THE KUNG-T'AN RIVER.

Mu-tung, (Blakiston's Hu-tung), is a considerable market-town on the right bank of the Great River, just at the point where this, in its downward course, takes a bend to the north-east. Like nearly all riverine towns in Eastern Sz Ch'uan, Mu-tung stands high above the winter banks; and, according to the shewing of the barometer, is about 300 feet lower than the highest parts of C'hung-k'ing. Mu-tung is considered to be the first *ch'ang* or market-town of the Pa District, and is the seat of a Sub-district Deputy Magistrate. In a certain sense it may be called the port of Nan-ch'uan District, for here are discharged consignments of cotton from junks carrying upward cargoes to Ch'ung-k'ing; the freight for the 90 additional *li* to the latter city is thus saved, besides the cost of carriage up the K'i-kiang and Fu-t'ou rivers to Nan-ch'uan. Tea is also brought hither for export to Ch'ang-shou and other neighbouring towns, for Nan-ch'uan produces a (for Sz Ch'uan) very superior leaf. There are also large official salt warehouses, and some flourishing rape-oil factories; all which industries combined make the town of more importance than an ordinary country mart. The large salt warehouses, the tea, cotton, rape, and other stores, are situated in the eastern part of the town, separated from the shipping suburb and port by a distance of half a mile. From the top of the hills behind the town a very fine

view of the Great River is obtained, and of the two bends of which Mu-tung is, so to speak, the southern apex. The road from Fu Chou to Ch'ung-k'ing runs through the town, the former being two days', and the latter one day's land journey from Mu-tung. In the summer time, when the river is high, Fu Chou can be reached by water in a short day's journey from Ch'ung-k'ing, though the distance is considerably over 400 *li*; whilst the upward journey, on the other hand, takes from four to six days, according to the size of the junk, the largest of course taking the longest time.

The road to Nan-ch'uan runs through both the maritime and the commercial towns, and passing San-chia P'u, five *li* distant, takes a south-easterly direction to Ngai K'ou, thirteen *li* from Mu-tung. After ascending a ridge to the height of 900 feet, it descends equally precipitately to Mei-tsz Kou. The bottom of this valley, a little below Mei-tsz Kou, is of exactly the same elevation as Mu-tung. On the way we met numbers of men carrying *sung hiang* or *sung yu* (resin or? mastic), the price of which varies from 40 cash the catty in the country to 80 cash in the town. It looks like bees-wax, and is, I believe, chiefly used for cementing coffins. One of the runners stated that his master, the Magistrate, had recently, on the decease of his maternal aunt, melted down as much as 80 catties of this nard as a lining to the lady's coffin. The coolies said that the material they were carrying came from Kê-t'ou T'an, a place which subsequent enquiry shewed to be to the east of the Nan-ch'uan road. We also met innumerable coolies carrying heavy coffin-boards of cypress (or? cedar) and pine. Prices are of little use as a guide in these parts, where a few *li* of porterage speedily quadruple the cost; but two dollars in the country and three to four taels in the town would seem to be a fair average price for one thick plank, *i.e.* one side of a coffin. The Chinese, who live in what to us seems a state of misery and filth, even when their means make such endurances unnecessary, spare no expense in order to be comfortable and fragrant in death. This, in so materialistic and unimaginative a people, seems to point to a very deep belief in a future life, although, (as I have submitted elsewhere)* this future seems

* Chinese Comparative Family Law.

rather to be embodied in the past, if so paradoxical an idea can be admitted.

From the very outset, the country looked poorer than on the road from Ch'ung-k'ing to K'i-kiang. Most of the irrigated arable lands, and those parts of the hills which were terraced and not occupied by bamboo and pine plantations, were given up to paddy, and, lying sweating in the sun, under manure and water, presented anything but a charming picture to the eye, or a savory odour to the nose. The ridges between the paddy-fields and the other cultivated patches were taken up by beans, peas, rape, and the poppy, all in a backward state compared with what we had seen a month earlier farther west. Perhaps a few words concerning the cultivation of rice as carried on in this part of the world will not be taken amiss.

In Sz Ch'uan the *mu*, or Chinese acre, is almost unknown to popular parlance. The usual way is to speak of so many *tan*, (300 to 400 catties), of unhusked rice. For instance a man who owns 1,000 *tan* of paddy means that his land produces an autumn rice-crop worth about Tls. 3,000, irrespective of the house-rents, *fang-tsu*, which he receives in addition to his share of the crops. A piece of land such as that mentioned would be worth perhaps Tls. 40,000 in fee simple if near a river, and only half that if 100 *li* distant; for, in addition to water supply, the carriage of manure, and that of the grain to market must be considered. After paying the 1,000 *tan* to the landlord, the tenants would have perhaps 400 *tan* to themselves; but this depends upon the amount of the deposit, *ya-tsu*, left by the farmer in the hands of his landlord. For such an estate Tls. 4,000 would be an average deposit. Ready money easily produces 12 to 15 per cent. a year in Sz Ch'uan, though the income derived out of land does not usually exceed seven per cent. The rule for payment of rents is *ch'i yüeh t'ien, pa yüeh tsu*, which means that the tenant must renew his lease in the 7th moon for paddy-land, and for dry arable-land in the 8th moon. The tenant cannot be ejected as long as he pays his rent, and the rights of both landlord and tenant descend to their heirs. Paddy-land of the poorer sort, in which the poppy is not cultivated as a winter crop, is thus managed. In the 8th moon it is turned up with the plough, *ch'ao tien*; and, after being left a short time

to the decomposing action of sun and sleet, the water is turned on to it in the 9th moon. During the 10th and 11th moons, it is regularly ploughed, and harrowed. During the 12th and 1st moons these two processes are repeated, after which the sloppy mass is left to itself. The next step is to prepare a small portion of the land for the rearing of rice-shoots; that is, all but an inch or so of water is allowed to run off, and the banks of the paddy-land are shored up with mud. Manure and lime are put into the land, and the seed (of course unhusked) is scattered in the second moon. About one quart of seed is required for a *tan* of unhusked rice, *i.e.* (in Sz Ch'uan) three catties for 300 catties. Scarecrows are then put up, and a watch against birds kept for about ten days. If the sun shines for three or four days during the next week or so, the young shoots will appear within a week or ten days after sowing. If it is dull and rainy for a fortnight on end, the seeds rot, and the whole process must be repeated in other ground. In twenty days the shoots are five inches high, and then two or three inches of water are allowed to cover the shoot-land. Where no river is handy, water is collected and stored in high-level pits called *yen-t'ang*. About one inch of water is now allowed to cover the land lying fallow, which, after being once more ploughed and harrowed, is planted, with the shoots, set two or three together. This is after the *ch'ing-ming* festival; or, say, three weeks after the vernal equinox. It should be mentioned that the shoots for transplanting are pulled up, in handfuls at a time, by the roots. The next step is to press into the ground (to serve as manure) the outer decaying shoots in each bunch of two or three, leaving the healthy ones in the centre; this is done about three weeks after transplanting. This process is repeated in the 4th or 5th moon, about 40 days after transplanting; and the crop is gathered in the 6th or 7th moon, about 100 days after the shoots have been transplanted. In the case of rich lands, from which the opium has been gathered in the third moon, these do not require to lie fallow, but have the water at once turned upon them, and after one ploughing and harrowing, are planted with shoots.

Of trees we passed many more of the *Aleurites vernicia* than I had ever yet seen in one day's journey; many of them were just

bursting into blossom. Cherry and peach trees were to be seen everywhere in flower, and the ubiquitous *Hwang-koh-shu*, (? *Ficus elastica*), in solitary majesty here and there. Another tree with long glazed large leaves was called by the peasants by the expressive name of *niu-shê lan* or 'neat's-tongue *lan*'; being ignorant of botany, I was quite unable to identify this, as also another called the *Tsz-ch'iu*. I noticed however a white flowered tree which the natives called *Ch'i-li hiang* or 'seven furlong fragrance,' a name very like that which the Cantonese (*Kau-lei-höng*) give to the *Murraya exotica*. The porters have a peculiar way of carrying timber. You see approaching you what looks like a string of gigantic walking V's, which strongly remind one of the of 'sandwich men' of London. The V's approach point foremost, and each of the shanks rests upon the shoulder of the man who carries the planks. The man rests himself by simply cocking up the V so as to allow its point to rest on the ground; and in this way he can carry four or six *lou pan* of pine,—a species of plank the measurement of which I have already explained elsewhere. Other coolies were carrying wooden ladles of all sizes, which I at first took to be the half gourds so common in the south; it turned out, however, that they were carved out of pine-wood, and the price varied from 40 to 90 cash according to size.

Swan-pei-'rh is again 900 feet above the valley below Mai-tsz kou, from which village it is distant eight *li*. The general direction of the road was still south-east, which much surprised me considering that, according to the maps, Nan-ch'uan was quite close to K'i-kiang. I observed here several pigs shod with grass shoes, such as I had already seen put on buffaloes and pigs in the more mountainous parts of K'i-kiang. The best grass slippers for men are made of hemp.

A very considerable trade in grass-cloth is carried on at Ch'ung-k'ing. The cloth is woven from the fibre of the *Chu-ma* (*Urtica* or *Boehmeria nivea*), a plant cultivated in considerable quantities all over Sz Ch'uan, but chiefly in the neighbourhood of Fu Chou and the Kung-t'an River, and next in order in the district of Shui-lin and the prefecture of Kia-ting, much higher up the Yang-tsz. Villages often cultivate small patches in the immediate neighbourhood of their cottages on beds of greasy clay,

too rich for the raising of cereals, on account of its liability to be overrun with insects. The seeds are sown in the spring, but need not be renewed. All that is necessary is that the stumps be each year covered over with cow-dung after the stalks have been cut or broken off. The first and best crop, [*t'ou-fa*], is gathered about the end of the year; the second in the 3rd moon; and the third in the 6th or 7th moon. It is considered better to tear off the stalks than to cut them; but, as this method is slower and more troublesome, it is not in use amongst the larger growers. The outer skin is stripped off with a 'hemp knife,' [*ma tau*], and the stalks, or 'bones,' [*ku*], are then spread out to dry, in order to be rid of their humidity, [*shui-ch'i*]. Hemp exported at this stage is called *ch'ing-ma* or 'gray hemp,' as distinguished from the *pê*, or white staple, so-called after it has been more fully prepared. The stalks are next soaked in water, and their inner skins peeled off. They are then scutched, [*li*], with knives, and washed in water impregnated with soda or potash; and, after being once more dried, are handed over to female labourers, by whom they are heckled, [*ch'ui*] and drawn, [*ch'i*]. The fibres are after this spun into yarn, [*fang-sien*], and woven, [*chih-pu*], into the famous summer cloth, [*hsia-pu*]. Most of the unfinished cloth is bleached, [*p'iao*], in special factories, [*tso-fang*]; but the labour is also performed on a small scale by village proprietors. The bleaching requires from 20 days to two months, according to the state of the weather, as much of the work has to be performed in the open air by a running stream, and the material has to be repeatedly re-wetted and re-dried. The chief hemp-cloth factories are those of Kiang-ching, Lung-ch'ang, and Yung-ch'ang districts. The cost of the unwoven fibre is from 80 to 90 cash a catty of sixteen ounces, or 8 to 9 cash the ounce of selected fibre when sold retail. There are two descriptions of grass-cloth, the coarse and the fine, made up into pieces of 48 and 24 Chinese feet. The finest large pieces cost from Tls. 2 to Tls. 3, and the coarser Tls. 1 to Tls. 1.50. The smaller pieces are of course about half those prices. The chief export is to Peking, partly by water and partly by land; partly, that is, by Shen Si, and partly by Sha-shih and Fan Ch'êng. There is one large Peking establishment at Ch'ung-k'ing entirely engaged in this trade. The custom is for the Ch'ung-k'ing wholesale houses

to advance, the year before, a portion of the price to the Kiang-ching and Lung-ch'ang factors, who then issue circular notices to the villagers according to the orders received. There is a guild mart, [*hang*], for this commodity, and for hemp generally, at Ch'ung-k'ing, where the annual transactions in grass-cloth alone are said to exceed Tls. 200,000.

A certain quantity of *hu-ma* or Hu Nan grass-plant is imported into Sz Ch'uan, and is used in the manufacture of shoe soles; but the plant is considered troublesome to deal with here on account of its small size. An exceedingly fine quality of grass-cloth is, however, manufactured in Hu Nan, costing double as much as the local article.

The unfinished fibre, or *ch'ing-ma*, is exported in bundles to Hankow and Canton, whence it is also called *yüan-ma* or 'circular balls of hemp.' The plant grows to a height of four feet, and the stalks are about ¾ of an inch in thickness.

A coarser specimen of hemp is the *hwo-ma* or 'fire hemp,' which grows to a height of 10 feet or more, and is two inches in thickness. The fibre is obtained much as in the case of the *chu-ma*, except that the stumps, after the stalks have been severed, are ploughed up and used as fuel. The price of the fibre is nearly the same as the finer but more delicate kind, and the cost of the rope into which it is twisted is about 120 cash a catty. In coming up the river, I was informed by the boatmen that the cost of the halyards, (which resembled Manila rope), was from 200 to 300 cash a catty.

A third description of hemp is the *t'ung-ma*, the tree producing which grows to a height of ten or more feet, and bears a fruit somewhat resembling that of the *Aleurites vernicia*. It has four lobes, and each lobe contains a number of kernels. The fibre costs from 40 to 50 cash a catty, and is used in the manufacture of coarse packing rope. The rope, on account of its being almost invariably mixed with the next and last kind, costs no more than the untwisted fibre, most of which is said to come from Ya Chou in Western Sz Ch'uan.

The cheapest and coarsest hempen fibre is obtained from the *chuh-ma* or 'bamboo-hemp,' the thick stalks of which are first burnt until softened, and then snapped into lengths. The skin is then torn off, and the inner portion, [*ching*], which is the fibre,

[illegible]

[illegible] where, [illegible] milder than at Canton, the [illegible] a [illegible] from [illegible] thermometer hanging up in my [illegible] current of air through [illegible] degrees of Fahrenheit. The [illegible] temperature for a Ch'ung-[illegible] common.

[illegible] forty li [illegible] 99 [illegible] From this place [illegible] through [illegible] hills covered [illegible] Thirty li from [illegible] factory. These [illegible] stone or clay called [illegible] from the hills hard by. [illegible] some of which were [illegible] It is then mixed with water [illegible] round a sort of [illegible] the tile manufac-[illegible] and afterwards [illegible] The local price of ordinary [illegible] that is, about [illegible] further on, is eighty li from [illegible] and is [illegible] stage on the way to [illegible] At this place I had the pleasure of sleeping between a midden, a [illegible] and a potash factory,

After leaving T'ien-tsz Tien, the road runs due south to foot of Fu-lu (or Hu-lu) Kwan. Ten *li* from the former place you pass through a wooden gateway which marks the eastern boundary of Pa Hien. We are now in Nan-ch'uan. We overtook a few coolies carrying cotton cloth and salt, but most of the salt centred at Mu-tung is consumed by the surrounding villages, the main Nan-ch'uan supply going *vid* K'i-kiang. There were a good many paper factories on this road; and in one case we saw the water being conveyed up-hill by thin bamboo pipes carried across a gulley starting from a higher level on the opposite side. The coarsest brown paper is called *chih k'ou*, but, like the finer *ts'ao chih* or 'grass paper,' is also made from bamboo, the pounding being less complete. Pê-sha Ching is 20; Pê-sha Ch'ang, 21; Fên-shui Ling, 30; Pa-ku Ch'iao, 40; and T'ien-chia Ch'iao 45 *li* from T'ien-tsz Tien. During the past 30 miles there has been no appreciable change of level in the road, though the country around is decidedly cut up and irregular. We now began to come across tea trees, which are much higher here than I have ever seen them; (as yet I have seen but few); some standing 20 feet above the ground. The leaf picking is begun as soon as the bird called the *yang ch'üo* or *kwei-ku yang* (? cuckoo) begins to sing, which is after the *Ching-ming* Festival, or about the middle of April. The Chinese say that this bird is very seldom seen: in fact they say it is invisible; according to their account, it is about the size of a dove. On the banks enclosing the tea plantations were also a number of mulberry trees.

Just as I was beginning to tire of this tame scenery and level road, which was apparently going to continue southward indefinitely along the gulley, we turned sharp off to the east and commenced a steep ascent. Before we knew what we were about, we had climbed 480 feet, and arrived at a village at the top of the ridge called Hu-lu Kwan, thus 2,180 feet above the sea. On the way up we passed numberless flowerets, ferns, brambles, and thorns, which, I should think, would have been a feast for a botanist. An edible fern called *chüeh chi* (? *Pteris esculenta*), grew in great quantities on the sandstone hills. The Chinese call sandstone *sha-shih*, which is an exact translation of our word. They also distinguish the yellow, white, and grey. For the first

time here I noticed some peas with white flowers, and was told that these were the *ts'ai tou*, a sort of French bean, also used in the manufacture of sweetmeats.

A reddish thick velvetty-looking leaf, growing at the end of a long fluffy stalk of the same colour, was called *Mao-t'ung-tsz*, and was stated to be used as a cure for madness: it is also said that ropes are made with the bark. A small white flower they said was the *Twan-ch'ang ts'ao*, or 'bowel-bursting grass,' which is poisonous to horses; and a daisy-like flower growing on a thorn or nettle, the *Hwang-p'ao*. This I think must have been a wild raspberry. We tiffined at Hu-lu Kwan, and then took an easterly and south-easterly course through a series of very picturesque pine forests. Twenty *li* brought us to Kwan-yin Ch'iao, a large market where the fair was going on.

Leaving Kwan-yin Ch'iao, our road now took a more easterly course to Chin-chia Ch'iao, fifteen *li*, after passing which village we went still more east, and mounted the side of a hill to a point which the barometer marked 1,800 feet above Mu-tung. Looking back, we found we were at the upper apex of a horse-shoe, enclosing between two hills the valley we had just left, and forming a sort of Niagara without water. A little further on, we got a wide view of the country to the west, and found that T'ien-t'ai Sz and Shên-*tun* (not *tu*) Shan,—mentioned in my account of the K'i-kiang road,—were 250 *li* in that direction; so there can be no doubt whatever that the position of Nan-ch'uan, as marked on the maps, is exceedingly erroneous. The scenery so far was tame; eternal paddy ridges, hemmed in with thinly fir-covered hills. Of trees cherry seemed one of the most common. A tree with an ovate leaf called *tsên'-tsz-shu* I failed to recognise. I observed also several *Mung-tsz-shu*, the proper name* for which I hope to ferret out before long. We met numerous porters carrying varnish from the varnish-tree (*Ch'i-shu*, ? *Sandaraca*, or *Rhus vernicifera*), and soot from the *Aleurites* (*T'ung-yu*; *Yen-tsz*), used in the manufacture of ink. It was not unusual to meet men whose sole burden was five dollars' worth of cash. In this part of the country, money

* 楔子. It has a fruit like the *Gleditschia sinensis*; is thorny; and its wood is esteemed for making cotton-ginning bows.

is usually heavier than the goods it purchases. The road now turned more southward to P'ai-fang, a tumble-down hostelry 25 *li* from Nan-ch'uan. There were a great many ups and downs for the next few *li*, until we reached an opening in the hills called Lan-yi Kwan, (600 feet lower than our highest point in the morning), whence a precipitous descent led to the plain of Nan-ch'uan, a tiny valley, perhaps four miles in diameter, hemmed in on all sides by the mountains. We could see the city in a south-westerly direction. During the last few *li* we had met coolies carrying *Hwai-tsz* (*Sophora japonica*, price 50-60 cash the catty), used for dying neutral tints, and had overtaken others carrying native homespun from Sha-shih and other places in Hu Peh. It was done up in bundles of 20 catties each, worth ten dollars a bundle; one man carried four bundles on his back. We also witnessed part of the manufacture of native cloth in a place where a man was arranging the *king*, or warp threads, from an arrangement of bobbins placed in an arc. Spinning, with a very clumsy looking octagonal wheel, was going on in most of the country houses. The native cloth appears to be a much superior article to the foreign, whose only virtues are its cheapness, neatness and whiteness. Of trees I here noticed the *Kwei-hwa*, or *Olea fragrans*, and the *Hai-t'ang-tsz* (or ? *Cydonia japonica*). Also a shrub called the *Ying-shang-hung*, (? *Rhododendron*), whose existence I only note here in the expectation of identifying it at some future period. Half way across the Nan-ch'uan valley we passed a picturesque *Chieh-kwan-t'ing*, or 'official reception hall,' with temple combined, situated on an island in the river which rises in the mountains about 30 *li* to the south, and runs into the Great River at Lin Shih, 180 *li* from Nan-ch'uan and 60 from Fu Chou. From this it is more than ever plain that the position of the former city on the maps is very faultily, not to say absurdly, determined. Near the islet was a very fine stone bridge of 60 feet span, in one single bold arch. The bridge was 20 feet wide at least, and looked Brobdignagian compared with the surrounding pathway and houses. It is called the Lung-ching Ch'iao.

Between the bridge and the city are several very large irrigating machines, which are about the best specimens of primitive engineering I have as yet seen in China. They are in the shape of enormous

but lightly constructed wheels, some of them between 30 and 40 feet in diameter. The paddles are of matting, and are propelled by the force of the current. Between each pair of paddles, and running diagonally across the tire-face (so to speak) of the wheel, is a bamboo tube, closed at one end and open at the other. As each of these descends, its open end catches up the water, out of which it emerges only when the position of the tube is such that the water cannot flow out. Of course this position is reversed when the wheel has completed half a revolution, so that the water is poured from each tube as soon as each successively reaches the upper circumference of the wheel. But a bamboo channel is erected on a framework so as to catch this flow, and two other bamboo tubes or lengths of tube communicate at right-angles with the two ends of this channel, and, slightly declining, carry the water to the fields above. I have a vague recollection of having seen something of the sort at the Taku salt flats, but there I think the wheels were propelled by sails. The barometer marked 73.20 in the hotel at which I lodged. It had been set at 75.50 when I started from Ch'ung-k'ing, so that Nan-ch'uan must be about 750 English feet higher, or 1,550 feet above the sea level. I should add that the aneroid barometer referred to is one of French construction, marking one millimètre for every ten mètres.

There was a good deal of opium growing in the Nan-ch'uan valley; of the other crops wheat holding the first place. I had seen very little of either of these on the road from Mu-tung, and even in this valley they were in a rather backward state. The district is evidently a sterile and poor one compared with that of Pa Hien; amongst other signs of poverty, I noticed that the road was in a very bad state of repair, although in several places it was being substantially improved, whilst the few bridges we crossed were quite equal to the average. The rivers marked in the maps must be purely imaginary, for we crossed nothing deserving the name even of a brooklet the whole way until we arrived at Nan-ch'uan.

Nan-ch'uan is a small and insignificant looking city, even for Sz Ch'uan, where all the cities except Ch'êng-tu are of uncommonly limited area. The second city of the Province, Ch'ung-k'ing, is certainly not a fifth the size of Canton, either in population or space covered. The chief export from Nan-ch'uan

is tea, which, however, only goes to Ho Chou, Fu Chou, Ch'ung-k'ing, and a few neighbouring towns, and is unknown to trade outside the Province. Admirable coal, in fine lumps, without a particle of smoke, sells in the town for 9 cash the 10 catties of 24 ounces a catty, that is, four shillings and two-pence the ton. In the direction of Mu-tung this coal does not appear to be carried beyond Kwan-yin Ch'iao, and its satellite villages. The land-tax is about Tls. 2,000 nominal, with Tls. 2,000 'extra,' (*Ching-t'ieh*), and other levies, which bring it up to Tls. 9,000 a year. The salt consumption is 90 *yin*, or about 900,000 catties a year, of Fu-shun pan salt, the centres of distribution being Mu-tung and K'i-kiang. The population of the city and suburbs is not much if at all over ten thousand, and that of the district about ten times as many. As the basis, on which the official salt trade is calculated, is a minimum consumption of 3 mace weight a head *per diem*, *i.e.* seven catties a year, the computations of salt consumption and population sufficiently tally. There are over 60 *Ch'ang-fên*, or market-villages, in the district, and their small importance may be estimated from the fact that 30 *li* (10 miles) is the furthest distance from which countrymen come even to the city market, which takes place nine times a month. Along the roads there are numerous complimentary stone tablets erected in honour of 'our old father and mother,' the Magistrate, a benign old gentleman from Hainan, who has occupied his post for more than ten years. The people are excessively curious, but not violent, and are apparently less suspicious and cunning than their brethren of Ch'ung-k'ing. I was detained one day in this place by rain.

The weather did not look very promising as we started from Nan-ch'uan; in fact, the first forty *li* to Si-yang Kwan were a sullen plod through the inhospitable mud. The chief place passed was T'u-ch'iao, half way, a village which evidently takes its name from the fine large bridge close by. A small stream from the south called the Lung-ku-ch'e River, here joins the rivulet which runs past Nan-ch'uan. So far, our general course was east-south-east. At Sin-p'u-taz, five *li* beyond Si-yang Kwan, the road branches off in two directions, one branch running east to Pan-ho, and the other, which we took, following the course of the Lung-ku-ch'e

River to Ta Ho-pa. There appears to be no first-class communication between Nan-ch'uan and any place south of it. A famous table-land called the Kin Shan forms an almost insuperable barrier, but may either be crossed by a pass which bisects it called the Ta Ya; or rounded by way of Pan-ho, Ma-tsui, and Ta-kwo Ch'ang to the east; or, again, by way of Li-yung Ch'ang, Siao Ho-pa, T'u-t'u-ch'iao, and Tê-lung Ch'ang to the west. All three roads are execrable, but that by way of the Ta-ya-k'ou was universally pronounced to be impracticable for chairs, and very difficult even for pedestrians: this was the road, however, which I determined to take, in order to make Siu-shan Hien from the south, and to descend the Kung-t'an River (which enters the Yang-tsze at Fu Chou) at any point I might find convenient. The twenty *li* through the gorge from Sin-p'u-tsz to Ta Ho-pa present no great difficulty, except that there is rather a severe climb up to Ngai Ch'ien, two *li* from Ta Ho-pa. The scenery all the way is wild and fine, and cultivation of anything but maize ceases almost from the moment you enter the gorge. We met some porters carrying 120-catty loads of sulphur in cakes of 12 catties apiece, which they said came from the summit of Kin Shan. They receive 400 cash for the journey; and the sulphur, which costs 2,700 cash a load on the mountain, sells for 4,400 at Nan-ch'uan. The mines are worked under the surveillance of the Nan-ch'uan Magistrate. At Ch'ung-k'ing native sulphur costs 100 cash a catty; foreign sulphur twenty or thirty times as much. Other porters were conveying loads of medicinal roots for which the mountain is famous: *Hsüeh-t'êng*, 'blood cane,' (? gambier), a root having a red-coloured pith; and *Hwang-chiao-kên* were amongst those I noticed; besides two herbs called *Ti-tou-lien* and *Sz-chiang-tou-rh*, quite unknown to me. No doubt many of the simples used by the Chinese pharmacists are of great value, but in their anxiety to add to the number of their old and valuable remedies, they seem to have run to a ridiculous extreme, and to have assumed that every plant with a strange colour or taste possesses some mysterious virtue. In the gorge I saw growing on a bush a large bean resembling the 'locust,' which was stated to be a valuable remedy for jaundice; they called it the *Nien-wang-t'sz*. It serves as a thorny hedge.

Ta Ho-pa is simply a sheltered acre or two of arable land at

the foot of Kin Shan, with a single hut for the accommodation of travellers. Yet I was very comfortable in my barn-like quarters, away from the odious smells inseparable from town habitations. Just above the *Pa* or 'slope,' a very fine peak or crag juts out boldly into the middle of the gorge; the next day, when we had mounted far above it, I ascertained that it was called Tu-ma-t'ou, or 'Nag's Head.' No rice was procurable at Ta Ho-pa, nor indeed anything whatever but maize, the winds being, according to local statement, too strong for other crops. The *p'i-p'a* (*Eriobotrya japonica*), was to be seen amongst the brush-wood, firs, and bamboos which covered the mountain sides, and a cauliflower-like flower called the *Yang-sz-tsz* was to be seen every-where. The height of Ta Ho-pa above Ch'ung-k'ing I made out to be 1,800 feet.

When we started upon our formidable climb of the celebrated Kin Shan, we could see nothing whatever of its summit in any direction. It was a drizzling and threatening day, which looked as if the wet season was beginning. Retreat was inglorious; advance bordered on despair. However, as soon as we had reached a height of 3,830 feet above the sea, the mist below us partly cleared off, and enabled us to look over the Tu-ma-t'ou, and the sea of hills beyond. Nan-ch'uan lay to the north-west, and although we could not distinguish the city through the mist, yet we could form a good idea of the splendid view that must be obtained in clear weather. When it is very fine, not only Nan-ch'uan, but also K'i-kiang can be distinguished from the summit of Kin-shan. By the way, the stages between these two cities are Wan-shou Ch'ang and Tsao-kwo P'ien, the former 60 *li* from Nan-ch'uan, and the latter 60 *li* from K'i-kiang, and the two 60 *li* from each other; that is 180 *li*, or sixty miles in all,—the same distance as to the Great River at Liu Shih.

It was as much as six men could do to get my empty chair up the mountain; it was the first official chair that had ever been up its side, and created almost as much astonishment as a coach-and-six would do in driving up Snowdon from Llanberis. The mist very accommodatingly transferred itself for a few moments from the summit once more to the foot of the topmost peaks, when we had gained the height of 4,160 feet above the sea. Three

peaks standing out on the west side of the table-land marked the positions of Kin Fu-sz and Sz-tsz K'ou, near which place are the 'new' and 'old ladders,' by which alone that part of the mountain can be scaled. From what I could see of the part south of us, Kin Shan is an irregular mass about ten or fifteen miles in diameter, bisected at about 1,000 feet from its highest levels by the Pass of Ta-ya-k'ou. The upper part of the mountain is perfectly sheer in almost every direction, but the irregular top, which resembles a cork rudely thrust into a squat bottle, is broken up into cathedral-like spires and other fantastic shapes. Our highest point I made 4,850 above the sea, and, just before reaching it, the Ya-k'ou, or pass, takes a bend or two eastwards, (without, however, discontinuing its general southerly direction), across a moderately level portion called Shan-tsz P'ing. From this point we got occasional glimpses of the spire-like crags above us to the east; yet at no time did I obtain a complete or prolonged view of any considerable part of this famous mountain. Snow was still on the ground at 4,800-4,850 feet altitude; and here not even maize would grow; bamboo-shoots, potatoes, and *Hwang-lien*, (? gentian), were the only comestible things that would come up. We passed several sheds or frames where the *Hwang-lien* is cultivated. A species of oak called the *Ta-yeh P'ao Ch'ing-kang* or 'soft, big-leafed oak,' and a tree called the *Ch'in-ch'ai* (? *Chin-ch'ai* or *Dendrobium*) were amongst the brushwood, which, with bamboos and brakes, covered the top of the pass. Descending 300 feet to T'ieh Ch'ang, we were pleased to find that rice was procurable. This place, (or places, for there are the upper and lower of that name), is so called from the iron-works there flourishing. Each furnace pays an annual licence of 48 strings of cash, and produces on the average about 18 *tan* of iron a day. The roughest iron, (*Shêng-pao*), after one smelting, is sold for two strings the 140 catties, and the pig-iron, (*Mao-t'ieh*), at 2,600 cash. Wood or charcoal fuel is used in the manufacture, coal-heat, (to use a local phrase,) not 'bringing out the iron.' Wretched coolies struggle along with 140 catty loads of this iron upon their backs. Carrying-poles are but little used in the K'i-kiang and Nan-chu'uan districts, the almost universal means of porterage being the cradle, or basket, slung on to the back and shoulders. De-

scending another 250 feet, we came to a paper factory, where bamboo reeds were rotting in lime. Another kind of very tough packing-paper, (*P'i-chih*), is made from a tree called the *Kou-shu*, or 'paper mulberry,' which is very common in Kwei Chou Province. Near this factory, the mountain torrent descends in rather a pretty fall called Kan Ho-kou. The Ta-ya pass is owned by one or two rustics, one sturdy specimen of whom undertook to carry my trunk, (about 88 lbs), up and down the pass for the modest sum of sixpence. He said that he was rated a 'six *fên* of silver' tax-payer; but that the 'custom' was to count one *fên* as ninety cash, which, with 'expenses,' brought up his annual land-tax to over 1,000 cash a year, or over ten times as much as it nominally was. He owned a very wide tract of land, but most of it was unproductive of anything but brushwood, a little maize, and whatever medicinal roots he could find.

Sin Ch'ang, 40 *li* from Ta Ho-pa, which was once a stage from the latter place, had recently ceased to exist. Nearly the whole day was consumed in plodding those weary 40 *li*, (more like 80), in rain and slush, and we were obliged to quarter ourselves for the evening in the homestead of the rural headman;—much to his disgust, for he imagined that (as with native officials) we were going to live on his substance without paying him anything. But an understanding was soon come to, and we left the next morning on the best of terms. Headman K'ang's farm is 3,290 feet above the sea; but we had to descend 270 feet from the high-road or path to get to it. From this house we got the first receding view of the Ta-ya, which I could now see was simply a slit in the table-land, not far from the top. Rounding a corner (3,560) we came in view of Tê-lung Ch'ang to the south, at a distance of about four miles from us, but at the other side of an amphitheatre. The descent was very difficult; and, as we came down, we could see that we were leaving Kin Shan on the west of his chasms. A great many varnish trees, (*Ch'i-shu*), were growing on this slope: they flower in the seventh moon, and are cut in the eighth or ninth. Varnish is also produced in the Siu Shan and Nan-ch'uan Districts, and in the Yu-yang Department. Our lowest point was 2,600 feet above the sea, where we crossed a stream running from the east in the direction of Siao Ho-pa. I think this must be the

Fu-t'ou River, which joins the Sung-k'an River on the Kwei Chou frontier. As we mounted to Tê-lung Ch'ang, (3,200), we obtained a very tolerable view of nearly the whole of Kin Shan and its precipitous summits. The two ladders on the north side, which are said to scale the mountain in a score or so of stages of from ten to twenty feet apiece, and the Ta-ya Pass running north and south, appear to be the only approaches to this angry monster. I believe that hitherto no European has set his foot upon it; and I regret that the state of the weather was such as to prevent my acquainting myself more closely with it.

Tê-lung Ch'ang is approached from the west by the Siao Ho-pa road, and from the east by the Ma-tsui road, both running from Nan-ch'uan. I found that the pan-salt consumed in this market-town all came from K'i-kiang, which says much for the difficulties of the Nan-ch'uan road. The Sz Ch'uan salt system would (under native management) be impossible, were the communications more open. No one can form a conception of the utter isolation and remoteness of a Kwei Chou or Sz Ch'uan border city without having been there. The salt was not dear at 48 cash the catty; but at Têng-chia Pa, on the Kwei Chou frontier, only 60 *li* farther on, it was said to cost over 60 cash. The next place in Kwei Chou on the Têng-chia Pa road is T'u Ch'i, 60 *li* beyond. This, however, was not our route. After passing Li-chia P'ing, (3,335), five *li* from Tê-lung, we rounded the amphitheatre to the east, and gained the neck of Shui-hang Ch'in, (3,620), a *Ya-k'ou* or V-like pass connecting two amphitheatres. The corner of Kin Shan which we had rounded in quitting the mountain lay to the North-west from this point. A few *li* further on the road divides, the east branch running to Têng-chia Pa, and the west, which we follow, running round the west side of the amphitheatre by way of Pwan-p'u-tsz, Sin-ch'ang, and Hwo-shih T'ai to another neck, almost exactly opposite that just mentioned. On this road I met 'mountain silk-worms' being conveyed in airy baskets to market. The Kwei Chou *likin* on mountain silk (*i.e.* fed on the oak, not the mulberry) is Tls. 5 the hundred catties export. On other silk, (*Hwang-sz*), Tls. 10. The whole of the districts in the Tsun-i Prefecture produce silk in large quantities. The amphitheatre we are now rounding presents some very fine, if not decidedly grand mountain

scenery. First on our east, and then on our north was the remarkable peak Chih-mu Shan or 'Thumb Mountain,' jutting up for all the world like a thumb, perhaps a thousand feet out of the arena. Kin Shan was completely hidden by another rugged range which stood before it like a curtain, divided at the Shui-hang Ch'in Pass, and terminating in picturesque looking spires east and west. One of its most remarkable peaks, just above the Pass, to the east, is called Sha Ngai. Far away to the west is dimly discerned a still higher range called P'in-mu Shan. The roads were so sticky that our coolies had to put on iron clamps, (*Chüo Ma-tsz*), under their straw shoes. These shoes, which cost from 10 to 20 cash, (½d. to 1d.), the pair, are admirably suited for rough travelling. One pair will last a week in fine, and at least a day in the worst weather. They are fastened on like a sandal, round the heel and through the interstice between the large and second toes. It was market day at Tè-lung Ch'ang; and amongst other things fowls were being conveyed to market in hampers, one man carrying as many as 40 fowls on his shoulder pole,—for fowls do not seem to take kindly to the back. Maize was being planted, for reaping in the ninth moon, and indigo shoots for harvesting in the ninth to eleventh moons. A road branches off, to the west of our road, to Ts'ao-pa Ch'ang, 70 *li*, on the T'ung-tsz (Kwei Chou) frontier, passing the village of Kwan-fu Ch'iao. T'ung-tsz is celebrated for its *Aleurites* oil, quantities of which we met being carried to Ch'ung-k'ing. One hundred catties, worth 4,800 cash here, fetch 8,000 there. Arrived at the pass on the south side of our amphitheatre, we see that the Shui-hang Ch'in Pass lies E.N.E. of us, and, taking a last look at the magnificent mountain scenery, we turn our faces south, and see that we are about to descend into a long narrow glen running south-south-east. Ho-ch'i Ch'ang, (2,000), our destination, is at the extreme end of this glen, which contains a great many and various trees, the *Fêng-hsiang*,* a reddish building wood, on the branches of which grow round prickly burs; several large specimens of the *Sz-li*, I believe a sort of oak (? *Aleurites triloba*); a tree called the *Pao Ké-tsao*, the bark of which when burnt gives out a fragrant

* Or *Hsiang-sz* ? *Acer pseudo-platanus*, or ? *Liquidambar formosana*, or ? a sycamore. The wood when buried is said to turn black.

odour; the *Wu-pei-tsz*, (? *Rhus Semi-alatus*), with withered looking tassels, (fruit gathered in the sixth moon); the jute palm, (*Chamaerops* or ? *Borassus gomutus*); and of course the ubiquitous cypress, bamboo, peach-tree, &c. Opium and wheat were both being planted in this valley, and amongst the brushwood the cauliflower-like *Yang-sz-tsz* was universal.

The best course for anyone to follow who (as is most unlikely) may wish to see this part of the country, is to do K'i-kiang and Nan-ch'uan together, without entering Kwei Chou at all.

About five *li* from Ho-ch'i Ch'ang, you cross the frontier at a place where the stream here, running from the direction of Kwan-fu Ch'iao, takes a bend to the south. There is no village or visible sign except a solitary tree perched high upon the crag, near to which is said to be a stone tablet. A good deal of opium was growing between Ho-ch'i and Sin Chow, (2,000), and wheat fields were numerous. I also observed fennel growing wild. Sin Chow produces saltpetre, quantities of which we met being conveyed to Nan-ch'uan, to be used in the powder manufacture. Some said the fuel used was *Pê-hsiang* (? cedar), others the *Ma-lin* (? *Fraxinus*), facts which convey no realisable information to me, but which I note down for future reference. Before reaching Sin Chow, our road divides into two, the eastern branch joining the Ma-tsui road at Ta-kwo Ch'ang, 90 *li* distant, passing Yüan Ts'ên and Hwui-lung Ch'ang, (each thirty *li*), on the way. The Kwan-fu Ch'iao stream runs to Yüan Ts'ên; but I may mention once for all that nothing we have yet seen, since leaving the Yang-tsze, at all deserves the name of a river. Our course from Sin Chow still lay south, through a small plain richly cultivated with opium and wheat, but not in a very advanced condition. At Tau-ma K'an, (5 *li*), we commenced the ascent of the side of the narrow glen through which we were advancing; and, after climbing 600 feet, reached the neck of Tsz-ni-'rh-p'o, (13 *li* from Sin Chow). From this point we descended 600 feet, and continued along a not very interesting valley to Yang-hsin T'an, a little village which possesses a new bridge worth about twice as much as the whole contents of the village. In architecture it resembles very much those at Nan-ch'uan and T'u-ch'iao, being of one single arch, perhaps 70 feet in span. The top is flat, with a granite parapet to

keep passengers from slipping over; at least twenty feet in breadth, it is mounted on each side by a handsome flight of granite steps; in fact, the whole bridge appears to be of granite,—though of this I will not be certain, as I only observed this after I had crossed. The cost of it so far has been 5,000 strings, and 1,000 strings more are required to strengthen the piers or bastions at each end, and to embellish the wretched path which conducts to the bridge. Nothing is more striking in rustic China than the *realty* of property. At home, where personal property has assumed such dimensions as to be of equal importance with real, and to have become a matter to be taken for granted, it is difficult to conceive a state of affairs where property of value only exists in fields, cattle, and bridges. When we read of English Kings levying their fifteenths, it will not do to think of jewelry, coupons, pictures, and such personal luxuries. The interior of Carnarvon Castle gives one a fair idea of the personal property of the middle ages, which even in the case of the nobles, probably consisted chiefly in bedding arrangements, a silver ewer, arms, and personal apparel. As a rule a rustic Chinese house has nothing in it but a few dilapidated tables, benches, and cooking utensils. A man's other personal property is usually, or may be, on his back, and a fifteenth levied upon him would average no more than something like a lame table and an old waistcoat. Even amongst the rich, clothes are by far the most valuable part of their possessions. I was talking a few days ago to a Chinese Colonel whose family had just been shipwrecked. I said, 'Well, after all, it is only clothes that have been damaged.' 'Yes,' he said, 'but those are my official savings of several years.'

The little stream which runs east from Yang-ch'i Ch'iao is said to continue its course to Sz-nan Fu in Kwei Chou Province, but I think that cannot possibly be; if so, we shall come across it again. Leaving Yang-ch'i we ascended a mountain side in a southerly direction to the height of 870 feet, whence we obtained a very clear view of the Tsz-ni-'rh-p'o pass to our north-north-west. Having tiffined at a small inn just over the ridge, we descended 640 feet and proceeded along a not very interesting succession of winding valleys to An-si Ch'ang, a walled market-town with a population of perhaps 4,000. On the road we met porters carrying eggs all the way to Nan-ch'uan. Money is

evidently very scarce in Kwei Chou, for, even on the frontier, able-bodied men are content to work for 50 or 60 cash, (say threepence), a day. A great deal has been said about the infinitesimal sum on which a Chinaman can live. Even in Canton, where money is very plentiful, I can vouch for the fact that one man can live (*i.e.* eat, for life in China consists chiefly in this) handsomely on two dollars a month. At Sung-k'an, in Kwei Chou, I was told by an official that a person possessing 2,000 strings (say $2,000) worth of property or capital was considered very well off, and, indeed, rich. My coolies consume about six bowls of rice a day, paying 7 cash for a full-sized, and four for a half-sized bowl; the saucers of vegetables, sauces, and spices costing an extra three or four cash apiece. The fixed rate for mountain chair-bearers is 300 cash a day; so that these men can easily save 400 or 500 per cent. on their disbursements. The usual charge for lodging, including straw mattress and bedding or quilt, is from 10 to 20 cash. A dollar currency, where the smallest unit is a cent, would be quite beyond the means of the inland provinces, where interminable wrangles take place over one single cash, and where one cent purchases almost anything a man wants. Beautifully woven light bamboo frame hats, made water-proof with oil-paper, cost from 20 to 30 cash. Fine wholesome deal buckets are made at 50 cash the pair in the country, and are sold at 80 cash in the towns, after 20 or 30 miles carriage. Straw shoes are from 10 to 20 cash a pair; and, in short, salt, at from twopence to threepence a catty, (a price which seems to us cheap enough), is about the only household article possessing a high value. The fine tough-looking paper, called *P'i-chih* or 'skin-paper,' already mentioned, is made in great quantities in this part of Kwei Chou, from the bark of a tree called the *Kou-shu*, which also makes good rope. We saw this paper exposed for sale in most of the villages where markets were being held. Pigs are either driven to market in Irish fashion with a wisp of straw round their loins, or are carried in single baskets on the back, or in double baskets slung on shoulder-poles. The dogs about here seem very snappish, and most of them are muzzled during the day with a piece of cord. In the hamlets I noticed advertisements of cures for hydrophobia, a disease which, according to the advertisers, first manifests itself by

dread shewn of the noise of a gong and fear of the breeze produced by a palm leaf fan. Nearly all the houses on the frontier have a 'respectable' certificate affixed to the door, reciting that, as order has only just been restored in Kwei Chou, it has become necessary to make the rustic population answerable for its continuance, by organizing a system of mutual responsibility in tithes and hundreds. The certificates contain spaces for the name and *original* domicile of the householder, the date of his immigration, the names of his wife, concubines, sons, uncles, mothers, and so on; from which—were evidence needed—it may be concluded that, as in Sz Ch'uan, the population all comes from Hu Kwang and Kiang Si. But the dialect spoken sufficiently proves this.

Proclamations also contain warnings against the extortion of double or treble land-tax, but these probably mean very little; as the magistrates are absolutely compelled to eke out their insufficient salaries by exactions of this kind, whilst the runners receive no pay whatever; and, as they have over and over again told me, look to 'warrants' as their emolument. When a runner receives a warrant, no matter for what purpose, whether to collect taxes, arrest offenders, or summon litigants or witnesses, he feeds on the 'little brief authority' thus placed in his hands until he has reached the limits to which his conscience, fear, or good-nature will permit him to go.

At An-si Ch'ang the women assisted the men in the blacksmiths' shops, and it was a droll sight to watch an unkempt matron wielding a sledge hammer twice the size of her miserable foot. Balls of ink, made from the soot of the *Aleurites* oil, were exposed for sale, and iron seemed to be good and plentiful. The poppy was growing, wherever the nature of the ground allowed it, all the way between Yang-ch'i and An-si, but not in a very advanced state. Mulberry trees, *Olea fragrans*, *Chüan-tsz-shu* (? *Croton sebiferum*), plum trees (*Li-tsz*) in flower, diversified the everlasting silkworm oak, bamboo, fir, pine, and cypress.

The *P'i-p'a** (loquat) was coming into flower; some of the silkworm oaks grew to great heights, and resembled poplars; the *Hwang-koh-shu* seemed to have given place to the *Niu-shé-lan*, and the ground gradually assumed a rockier, yellower, and more

* This is called *biba* in the neighbourhood of Marseilles.

barren appearance. Maize was selling (picked from the cob) at 250 cash the local peck of ten catties—a halfpenny a pound,—and rice at the same rate. The country opens out a little after we leave An-si, and we seem to be rounding the range to the north as we go more east; wheat and the poppy are more plentiful. An-si is half way between Yang-ch'i and Chêng-an Chou, a distance of 60 *li*; but the *li* on the Kwei Chou frontier seem double the length of those on the Sz Ch'uan high-roads. At Ch'iao-ch'i Ho we crossed a very picturesque and handsome one-arched bridge over a stream running through a very beautiful gulley. This stream passes a mile or two to the north of Chêng-an, and about five miles beyond that city is joined by another river coming from Sü-yang Hien. I cannot help thinking this must be the same stream that we crossed in the morning; or, what is more likely, that the stream of Yang-hsin Ch'iao joins it at some point in the mountains. We could not well cross twice a river running east on both occasions without having crossed it intermediately as it ran west. Both streams are unnavigable. I now distinctly recognized a difference in the people, who were healthier, honester, and more simple looking than what other Chinese call the 'Sz Ch'uan rat.' Climbing up the south side of the gulley to the pass of Lau-ying Kwan, we see the pagoda of Chêng-an city to the south-south-east, and discern some mountains at least 4,000 feet above the city to the south-east, and beyond it. These are called T'ien-lu-hang, one of the peaks of which goes by the name of Yin-fu Sz, and is said to be the *Fêng-shui* or 'geomantic ruler' of Ch'ung-k'ing city. I forgot to note down the elevation of Chêng-an; but I think it was 900 feet above Ch'ung-k'ing, or 1,700 feet above the sea.

Chêng-an Chou is a diminutive little place with a population, all told, of 2,000. The whole district only contains 10,000 householders. It pays an annual land-tax of Tls. 2,000 a year, and 700 hundred-weight of rice. Eleven graduates are annually allotted to it, which is more than Nan-ch'uan has with ten times the population. The magistrate's salary is Tls. 100 with Tls. 700 'anti-extortion' allowance, as it is usually called, but of course this is not enough to keep him in decent state. The chief trade of the place is in *Shan-sz*, or wild-silk, from insects fed on the *Ch'ing-kang* oak in the open air. A few miles beyond the city, I

met some peasants carrying eggs, or rather caterpillars just emerging from the eggs, to be placed on the trees. The eggs come from Ho Nan, and on the spot were worth 4,000 cash the bowl of 40,000. When the grubs emerge from the eggs, they are placed upon clean white paper, and propped up on the oak branches with cedar or? cypress leaves, (*Biota orientalis*). The Kwei Chou people do not know how to manufacture or dye the silk, which goes back to Ho Nan for those purposes.

I found Chêng-an a most difficult place to get away from. The official high-road into Sz Ch'uan is by way of T'ung-tsz Hien, Sung-k'an, and K'i-kiang, or, to the eastern part, round by Sz-nan Fu to Siu-shan. The prospect of three weeks' journey by way of Sz-nan was exceedingly distasteful to me, and I therefore determined to forsake my original intention of going to Siu-shan, and to strike east by way of Wu-ch'uan to Kung-t'an, the highest navigable point on the Fu Chou River, and an important frontier station. I lived almost literally in a pig-sty at Chêng-an. My room, the best in the inn, the best inn, again, in the town, was separated from the sty by a thin wooden partition. Windows are the exception rather than the rule in Sz Ch'uan inns, and in this case a dim light was admitted through a filthy paper grating opening over the pig-sty. I had to choose between a curious gaping crowd in front, or dull light and penetrating rancid odours in the rear. Chinese inns must be the sorriest on the face of the earth. Perhaps the foulest spectacle the world offers is a Chinese oil-lamp standing (or rather tottering, for nothing stands firm) on a Chinese inn table. The floor is the floor of nature, which no one has taken the trouble even to level, let alone to cleanse. Sometimes, if not generally, a bucket or jar, containing contributions destined for the paddy fields, poisons the room with its unpoetical contents. Cobwebs of ominous thickness invade every possible corner; the roof always leaks, and if you are unhappy enough to find a paper ceiling, it invariably showers dust and dirt through the holes around which the still existing fragments of it hang. The woeful discomfort is of itself complete, but is made worse for the foreign traveller by the ubiquitous noisy crowd, which assails him from above, below, at the sides,—from everywhere. The fresh mountain air and the beauties of nature are the only compensations which he

receives. I found at least one good thing in Chêng-an, however, and that was honey, of the purest and finest description, and I endeavoured to sweeten life by eating a quarter of a pound of it at each meal. During the last five days I had been quite unable to make use of my chair, for even if the coolies had been able to stagger over those mountains, the sight of their slipping and straining was quite enough to deter me from the attempt. Fortunately I had a pair of American cloth-topped goloshes, and with these on I plodded through the slush for 100 good miles, and got quite the better of the grass shoes worn by the coolies.

After a day's stay at Chêng-an we quitted the city by the east gate, and for the first 10 *li* proceeded along a very fair road, amid wheat and poppy patches, to the point where we met the river coming from Ch'iao-ch'i to our north. The road winds about a good deal, but its general course is east. Ta-yü T'ang is the first village we pass; this is the place where the Sü-yang (from the west) and the Ch'iao-ch'i Rivers join, the stream then running north, and entering the Fu Chou River at Kiang-k'ou. We had to cross the Sü-yang River in a boat; the height of its bed above the sea is 1,700 feet. It looks a fine enough river at this point, but I was told that it was not navigated. Were there even decent cattle accommodation for travellers, nothing would be more delightful than to explore these small branches in a canoe. We mounted once more after leaving Ta-yü T'ang, and at 2,150 feet above the sea turned south-east, and then again east to Ko-ling-wo, where a market was being held. Paper of all descriptions, native cloth, pigs, pork, puppies, rice, maize, tobacco, and cheap household utensils were exposed for sale. So far, I had seen and heard nothing of foreign goods anywhere; except that near An-si Ch'ang I met a man carrying a load of what he said was *Yang-pu*, or 'foreign piece-goods,' which were going to the dyers. As yet I have only seen the south-east part of Sz Ch'uan, (in which I include the Kwei Chou frontier which was once part of the former Province)*, and I can emphatically say I have seen nothing resembling wealth or comfort anywhere. Silk certainly is common enough in the towns, but on slattern backs. The only travelling chairs you meet on the road are paltry little affairs made out of

* Mr. Hosie's otherwise excellent map is a little out here.

varnished mats, and which you can buy, poles and all, for a dollar apiece. The impression the people leave upon me is that of a suspicious, untidy, agricultural race, busying themselves with energy about trifles, and storing up their petty gains in order to build a handsome tomb or join in erecting a splendid bridge. At Ta-ho Pa, the landlord, whose house was a tumble-down shanty of mud and thatch, and who never tasted rice or tea, had just completed a magnificent granite tomb for his mother's last repose. To their credit I must say that they seem remarkably honest in these parts; for their squeezing and cheating propensities are only part of their trade-system, and cannot fairly be charged upon them as downright dishonesty. Schools are to be found in every village; but grown-up people are never seen reading, and it is hopeless to get the names of places correctly put into writing. Fields teem with produce, but no one is sleek and fat. None of my followers or porters ever take off their clothes or wash; and I never see anyone of either sex performing ablutions of any description in the houses, beyond occasionally washing the mud off their feet. In fact, the rustic Chinese seems to be a rice-consuming automaton. He rises with the day, labours wearily for a pittance and a grave, sleeps at dusk, and knows as a rule nothing of anybody or any place twenty miles distant. Yet, though far from hilarious, he seems contented and good-humoured, and quite unworried by ambitious cares.

At Ko-ling-wo I saw some *Aleurites* nuts exposed for sale,—the same as those Blakiston incautiously devoured at Poison Reach. They were 1,400 cash the *tan*, of ten *tou*, that is, the hundred weight, (133⅓ lbs.), of ten pecks. The man did not know how many catties, (1⅓ lbs.), the peck weighed, but he knew that one peck produced four catties of oil; that is 3,500 cash worth of nuts would produce a pecul of oil, and we have already seen that the local price of a pecul of oil near Tê-lung Ch'ang was 4,500 cash. By the way, I forgot to mention that at Ch'iao-ch'i Ho on the other side of Chêng-an Chow there are coal mines, producing very good but smoky coal. The price at the mines was 30 cash the *tan*, or pecul, and at the city, seven or eight miles farther on at the utmost, (counting in the difficulties of the road), 80 cash; that is, in one case two shillings, and in the other five-and-sixpence

the ton. Each coolie performed one journey a day, thus earning 50 cash.

Leaving Ko-ling-wo, we ascended one of the sides of a narrow valley eastwards to a place called Mei-chia Shan, 3,050 feet above the sea. We had been told at Chêng-an that our first day's stage was 60 *li*; but the man at the station of Mei-chia Shan informed us that we had already come 60 *li* but had not yet come *half* way, as we had still 30 *li* to go! No two men ever give the same account of the distances, and the next man told us that it would be impossible to reach the stage that evening (it was then three o'clock). We now turned south-east and mounted up another 450 feet, obtaining a magnificent view of the mountains to the north-west and south-west. For fifty miles at least in each of these directions we could see what resembled a vast sea of hills. The table-land of Kin Shan, or Kin-fu Shan, lay to our north-west, but covered by a provoking cloud, so that from first to last I never got a good view of this mountain. Sha Ngai, which some of our men also called P'ien Ngai, stood out very clearly about forty miles off to the west of Kin Shan. Chêng-an Chou lay nestled amongst the hills due west of us, and Yin-fu Sz was only a few miles to our south. It is said that when the furze on Yin-fu Sz catches fire, there will be floods at Ch'ung-k'ing. From the positions of Kin (Gold) and Yin (Silver) Fu-sz, seen from the angle at which we viewed both, I should think that the latter is due south of the former. Our highest point to-day was about a mile further on, when we gained an elevation of 3,800 feet above the sea. Unfortunately the peak we had just turned stood between us and Kin Shan, so that for the last time we were disappointed. Descending about 200 feet, we put up at the small hamlet of Hwai-hwa Ch'ih, where my lodging was on the cold ground, or would have been, had I not rigged up a sort of bed apparatus, with stools and planks. My 17 followers huddled together in the loft. I much prefer airy quarters of this description to the squalor of an inn; and indeed, had I only a covering against the rain, would as soon camp out altogether. The host and hostess of this farm seemed quite a happy couple, although the man was a cripple, and plunged along in a very ungainly way with his mis-shapen legs. He seemed to take great pleasure in dandling the baby, whilst the

mother had a cheery laugh and a joyous garrulity quite rare amongst the cramped Chinese womankind.

It rained heavily through the night, and the pattering on the tiles within a few feet of the coolies' heads gave them a restless night of it. The poor fellows' nightmares and dreams seem to be confined to the question whether it will be a fine day or no, for a wet one means weary labouring over the sticky mud. It is difficult not to sympathise with so patient, even though so unsympathising, a race. Our fifty *li* from Chêng-an had been a good day's work, and the next day we only made fifteen *li*, (five miles), or, according to some, ten *li*. This brought us to Ting-mêng-ngao, a village resembling those one sees in the Irish bogs; dark, sloppy and brown. My room in the inn was pitch dark, and, I thought, until I lit the candle, miserably dirty; however, I found that it was pretty well built, besides having a wooden floor; though I had to adopt all sorts of ingenious devices to stop up holes in the walls and shutters, through which the curious tried to get surreptitious views of me. In one village I found the following rhyme (translated) daubed on the wall:

Bewail not mountains high and low,
And dirty inns as on you go;
Think of the woes, my cheery hearts,
Of envoys sent to foreign parts!

As the rats had just eaten the breakfast laid out ready for my consumption in the morning, and had kept me in a wakeful state, owing to my anxious and vengeful efforts to surprise and summarily execute one as a warning, a poetic impulse evoked the following ill-natured reply, which I wrote on the wall:

Say not our lands are mean and frowsy!
'Tis you, my friends, that are so lousy.
Our hostels make the traveller glad:
The dream of them now makes me sad.

The scenery thus far from Chêng-an in some places resembled the Pass of Glencoe, and in others the walk between Braemar and Ballater, but the wildness of the hills was rendered insipid by the inevitable paddy-field, which was sure to appear in any spot where it was possible to make it.

There were a great many trees which I had never seen before;

the *ma-sang*, a sort of 'hemp' mulberry, but not used for silkworm feeding; the *mu-chiang*, or *hiang*, (? *Costus amarus*), some sort of spice (? put-chuk) ground up with their peppers by the Chinese; the *ting-mu*, a large tree furnishing good sculptor's wood; the *shui-ch'ing-hang*, (somewhat like the *Hibiscus syriacus*), I suppose a species of *Quercus;* and a large tree, like a willow, called the *hwa-ch'iu* (? *Catalpa Bungeana*). Of the *Pinus* kinds, the *sung** had disappeared and given place to the *sha*, of which I saw some specimens at least six feet in diameter, and of the same red colour as the *Pinus Bungeana* or *Wellingtonia gigantea*—the 'big trees'—of California, but without their spongy look; the Chinese estimated their age at between 1000 and 2000 years. The cypress, (or, *quaere*, cedar), is here called the *pê hsiang*, and not the *pê shu*, as in Sz Ch'uan; it is used in the manufacture of incense-sticks, and also as fuel in the making of gunpowder. Some other trees like banyans were called *tung ch'ing shu*;† *and* a small tree called the *hsiang kwei*, (? *Cinnamomum aromaticum*), was said to be also used in the manufacture of incense. The *fung-hsiang* grew in some places to almost the size of the *sha;* it had a very familiar look to me; possibly it may be the sycamore tree: it had round prickly burs or cobs, about the size of a cherry, studded with pins. The fruit of the *pê hsiang* in the state I saw it resembled a shrivelled cherry. Such are the feeble attempts at description which one ignorant of botany is fain to give. The *Aleurites* or *Eleococca* was common, usually along the dividing ridges of fields; also the silkworm oak, the varnish tree, (called by Williams the *Rhus succedunea*); and of course the bamboo. I saw a few jute palms, several plum and cherry trees, some tea plantations, and one or two fields just planted with indigo shoots. Opium struggled here and there in not very fertile land; beans and peas were backward and rare, and wheat conspicuous for its absence. Potatoes were met with in one place. (By the by, potatoes are common on Kin Shan).

* The *sha* resembles our Christmas trees, but is much coarser, almost like a double comb. The *sung* is more hirsute and has a more prickly look.

† Produces the drug 女貞子 (? *Rhus succedaneum*), said to be the same as the wax or *Pe la* tree.

In making our sixty *li* from Ting-mung-ao to Hu-yang ch'ang, we fetched a curve round some difficult-looking mountains, going first south, then south-east, east, north-east, and north; the total result being east. Our average height for the first few miles was 3200 feet, but we descended to 2480. Three or four *li* from Ting-mêng-ngao a small road goes east to Hwang-tu-Pa, by which Sz-nan Fu can be reached in six days' journey from Chêng-an, passing Chien-ch'a-ch'i, 140 *li* from Hwang-tu Pa, which is 120 *li* from Chêng-an. Sz-nan is 120 *li* from Chien-ch'a-ch'i. Fifteen *li* from Ting-mêng-ngao, a road goes south to P'ing-ti Yüan and Pê-kwo-shu, both belonging to Chêng-an; and a little further on another road runs south to Tang-chia Yüan. Of course these 'roads' are mere mountain paths, but the information may be useful to future travellers. At T'ing-tsz Pa, about 25 *li* from Ting Mêng-ngao, the boundaries of Chêng-an, Sz-nan, and Wu-ch'uan meet, and we are now in Wu-ch'uan; descending a few hundred yards, we cross the Ta-ch'e Ho, a small stream running from the south, and then descend to 1850 feet. The weather grew brighter during the day, and I imagine the barometer must have gone up considerably, for our descent did not appear to be anything like so rapid as marked by the barometer. Shortly after this we crossed two other small streams also running from the south, one being spanned by a quaint-looking stone bridge surmounted by a pavilion of wood. In all these streams water-wheels, after the type first seen at Nan-ch'uan were very common; there were also several ingeniously constructed mill-races turning a horizontal wheel, resembling a teetotum box, or the inner side of a mushroom, the axis of which was extended upwards through a hole, communicating with a covered shed and a stone rice-threshing circular channelled floor. To the upper end of the axle was attached a shank sloping downwards at an angle of 15 or 20 degrees, and at right-angles with the outer face-end of this shank was attached to it a stone wheel, running round the stone trough or channel filled with paddy. The peasants on this frontier smoke enormous cane pipes at least five feet long, the heavy copper or iron bowl of which with the strong stem would make, if necessary, a formidable weapon of defence. We crossed another stream at Jan-chia Ch'ang, 12 *li* from Hu-yang Ch'ang, our destination, where I had a good

opportunity of closely examining the threshing wheels. The river had now become a sufficiently large one, though it had hardly yet attained navigable proportions. Just before reaching Hu-yang, we had to cross it upon a primitive bridge much in vogue in these parts, consisting of a whole tree thrown across the stream and levelled on its upper surface, steadied by two piles, serving as piers, and driven into the bed of the river on the down-stream side of the log. There was no inn at Hu-yang, and we had to make the best of a very airy apartment, or rather single-roomed house, the greater part of which was simply open lath or wicker-work, through which the irrepressible boys could peer to their hearts' content. A frightful hullabaloo outside disturbed my already not very peaceful repose shortly after our installation here, and, on going outside, I found my followers in altercation with the villagers about some petty matter of the interminable 'cash.' One of my runners was just stripping for a fight, and, as I did not want a row, I thought it best to be on good terms with the villagers, so I boxed his ears ostentatiously before the crowd, and sent him in.

On leaving Hu-yang Ch'ang, we at first took the only obvious road, the one running north to Li-chia Pa. But, as often happens in this country of contradictions, the large highway at a crossing is a country path, and the insignificant path is the main-road. We had therefore to turn back and cut across to the east, re-crossing the river and pursuing our course to the south-east. At Pai-kwo ch'i, (1650), we commenced to mount again, until we gained a connecting ridge called Ngai-san-ya, (2220); our general course thence was east, sometimes north-east, sometimes south-east. Nearly all the houses here have a little shrine, the chief feature of which are the words: 'Heaven, Earth, Prince, Family, Tutor,' which fairly express in a string the general Chinese notion of *hiao* or 'duty,' (*pietas*). We took a snack at the house of a *twan-kung*, or 'wizard,' amongst whose paraphernalia of office was a strange-looking trumpet like a buffalo's horn, but apparently made of leather. The material is hardly leather; it looks more like a sort of *papier maché*, and I think I have seen teapots made of it. 'Yellow,' that is ordinary cows, not water buffaloes, of all shapes and sizes are met with on this frontier, some with humps like the Brahmin bull, some with long dewlaps, some small like the

Guernsey and Welsh cattle, some scraggy and bony; and of all colours, white, black, red, brown, and skewbald. The yellow cow is used for hill-ploughing, whilst the water buffalo wallows in the paddy-fields up to his middle. Crows and magpies seem very fond of perching on the backs of these animals, with whom they seem to be on the best of terms. We mounted another 200 feet, and thought we could discern the city of Wu-ch'uan to the south-east: of two peasants within twenty yards of each other, one said we had still 5 or 6 *li* to go, and the other said 30: such is the dense and stolid stupidity of these bordermen. In some places along the road the wood of the *ch'ing-kang* was being turned into charcoal in a sort of subterranean furnace, chosen at points where one side surface of the ground is attainable. Large tracts are covered with this tree in its young stage, at which it is most usually cut for fuel; but, as I have said, it is not uncommon to see specimens at least 100 feet high, and almost as straight as a poplar. Descending in various curves still eastwards to Shui t'ien-p'ing, (2150), the eighteen of us dined at the total expense of ten-pence, but, as some higgle-haggling was going on as I rose to leave, I overwhelmed the landlady with grateful astonishment by ordering in a lordly way three half-pence more to be paid to her out of my own pocket. These hardworking coolies seem never to touch meat; a little bean-curd, pickled cabbage, or pepper-sauce seems to be all they require to escort their rice down. After eating they drink the water in which the rice has been boiled. Tea is exceptional; indeed I found it often difficult to get clean hot water wherewith to make my own tea, and very seldom found a teapot in a country place.

At T'ou-mên Kwan, (2120), a pass or ridge 10 *li* from Wu-ch'uan, the road from Li-chia Pa, (70 *li*), joins ours, and after winding about and crossing another small ridge, we come in sight of Wu ch'uan Hien to our north-east. The little rocky plain or valley at one end of which the town stands is not more than three or four miles round, and what cultivable land there is we find occupied by the poppy; but, as usual, in a backward state. The height of the town above the sea was found to be 1850 feet in our inn. The population of the city is not more than 2,500, and the whole district is miserably poor, producing,

besides a small quantity of opium, little else than maize and potatoes. From a distance the little city is not unpicturesque, as a newly-built *K'au-pêng* or 'Examination-hall' and temple in one, painted a gaudy red, stands in a conspicuous place amongst the houses. The land-tax of Wu-ch'uan is about Tls. 1,200; eight *hsiu ts'ais* or licentiates are annually allotted to the District, and its salt comes up the Fu Chou River either by way of Kiang-k'ou or Sz-nan Fu. Formerly it all went to Sz-nan Fu, which is in direct water communication with the outer world; but, since the abolition of the local extortions of salt consequent on the introduction of the new regulations, it has begun to come overland from Kiang-k'ou, seven days' journey from Wu-ch'uan. The Tsz-liu-ching, (Fu-shun), pan-salt sells at Wu-ch'uan for 68 or 70 cash the catty of 18 ounces. From Wu-ch'uan Sz-nan can be reached in four days, and Siu-shan, by way of Sz-nan and Yin-shan, in seven or eight. The roads to Kung-t'an on the frontier, and to P'êng-shui Hien, two places about equidistant from Wu-ch'uan, both pass Chên-nan Ch'iao, a small market hamlet 60 *li* from the city. The P'êng-shui road then separates from the Kung-t'an road and passes Lüan-san-p'o, 30 *li*; Cho-shui, 50 *li*; Liu-ch'ih Pa, 30 *li*; Tien-shui Pa, 80 *li*; on the way to P'êng-shui, 50 *li*; or 300 *li* in all; but it must be remembered that, added to the difficulties of the road, the *li* are unconscionably long. The maps place P'êng-shui a great deal too far north of Kung-t'an and Wu-ch'uan.

I had been told at Chêng-an, (though I did not believe it), that Kung-t'an could be reached in one day, or at most two days from Wu-ch'uan; whereas four is the least by the ordinary route. But there is a shorter road by way of Pê-ts'un, Lung ch'iao, Lo-tung, Chiao Pa, K'ê-tien Pa and Chwang-han, by which it is possible for an unencumbered man, walking from morn to eve, to reach Kung-t'an in two days. The short and the longer roads run together as far as T'ao-hu Pa, 40 or 45 *li* from Wu-ch'uan.

For the first time for ten days we made a fair start when leaving Wu-ch'uan. It was neither raining nor threatening, the road was not muddy, and for the first mile or two it was broad, (*i.e.* six or seven feet), paved, and level. As we came out of the

east gate, a dilapidated structure crowning a ten-foot-high wall which would do no credit to an English farmer's outhouse, we felt quite exhilarated at the prospect. Turning north immediately after leaving the city, we continue in this direction for five *li*, when we turn west, the other road continuing to Kwan-yüan-pa. All the best land seemed to be taken up with opium, and where it was not, it was because the necessary manure was an outlay beyond the farmer's means.

The price of the local drug is about 140 cash the ounce. We mounted in a north-westerly direction until we gained a ridge which led down in the same direction to Siao-kwan-'rh, (1670). The birds were rejoicing with us at the change in the weather, and amongst others the notes of the *Hwa-mei*, a sort of thrush, were conspicuously audible. After we had finished our early breakfast at Siao-kwan-'rh, we descended to the bed of the River Tiao-lang-kang, which starts from Shui-t'ien-p'ing, (where we had our cheap tenpenny dinner), and enters, or is said to enter, the Fu Chou River at or near Wang-chia T'o. Just before crossing this river by means of the stepping-stones which often serve as a bridge over Sz Ch'uan streams, we passed a little one-chambered temple on the road-side, opposite to which a handsome looking mule was standing whilst our cavalcade went by. I looked into the temple to see who the owner of such a respectable article was, and was struck by his fresh and intelligent appearance. It turned out to be a French priest, of the courageous society of the *Missions Etrangères*, who was on his way from Wang-chia T'o to Wu-ch'uan, his station. It was certainly most agreeable to meet a clean and sympathetic individual in the midst of so much stolidity and dirt, and we had a quarter of an hour's chat together: unfortunately we were travelling in diametrically opposite directions. I forgot to take the height of the river bed, but I think it must have been at least 300 feet below Siao-kwan-'rh, *i.e.* about 1,400 feet above the sea. Shortly after crossing it, we passed a village called Yau-kwan Ch'ang, where coarse *kangs*, or mug water-cisterns, are made. At this village there was an enormous specimen of the *Sz-li-tsz* oak. As there are three Chinese characters, all of the same tone, for this sound, I cannot be at all sure of the tree. Mounting still north-north-

west, we met some well-dressed and strongly-armed soldiers conveying two malefactors to Wu-ch'uan. The men were handcuffed, but were otherwise free, and were walking on in a leisurely manner before their guards. They wore neutral-coloured clothes, which are, according to one of my 'guards,' who is himself both a gaol-bird and a gaoler, a sign that they have been guilty of robbery with violence, and are lost men. He says that they will be executed without reference to the Emperor as soon as the report of the trial has been sent to the Governor at Kwei-yang. A great deal of such summary 'justice' seems to be done in China, in the matter of robbery cases, which are put down with relentless severity. In many Provinces there are special regulations authorising departure from the usual rules in such matters. The gaol-bird added that persons guilty of wilful murder, murder and robbery, and land offences, (? agrarian outrages), were made to wear red clothes; and that these four classes did not receive the benefit of general pardons, being guilty of the *Sz-ngo*, or 'four abominations.' It is not legal in China to secure a conviction without confession, and consequently the greatest injustice is frequently perpetrated upon innocent though suspected persons with this object in view. On the other hand, hardened criminals give a great deal of trouble by *fan-kung*, or 'retracting their confession,' preferring a periodical application of torture, and a respite of idle prison life, to present death.

Continuing to mount in the same direction for 420 feet, we descended to T'ao-hu Pa, where the country opens out a little, though, if it may not be called mountainous, it is still decidedly hilly. The ground is barren-looking and rocky; but here, too, opium occupies the best pieces; and, wherever the hills have been cleared of brushwood, the indefatigable peasant has ploughed a few yards of land between the rocks. A little further on we cross a small rivulet which comes from a place to the west called Chou-chia P'o, and runs eastward to Pê-ts'un, a spot already mentioned as the first station on the shorter road to Kung-t'an. We ourselves are following the banks of a considerable and very muddy stream, which comes from the direction of Chên-nan Ch'iao, in which we are going, and also runs past Pê-ts'un. None of these streams seem to be navigable about here. Yin-wan

T'ang, where we leave the river, is 10 *li* from Chên-nan, at which latter place we put up for the night. There was very little variation from what we had seen during the past week in the trees passed on the road. Besides paddy and the poppy the land was chiefly being laid out for maize. We saw no wheat, and very few vegetables, but those were of a good quality,—chiefly beans and peas. I find the Chinese have very regular names for rocks: I have already mentioned that *sha-shih* is exactly our word 'sandstone.' Another common kind of rock (which I regret to say I cannot name) they call *yu-kwang-shih*, or 'oil-bright-rock.' Limestone is *hwai-shih*, exactly the same word as ours.

A noticeable feature of Kwei Chou Province, when once you get fairly across the Sz Ch'uan frontier, is the shape of the bridges, which are no longer solidly built of stone, but are covered-in wooden structures somewhat after the pattern of that at Lucerne, but of course much inferior in quality: nevertheless they afford an agreeable shade. We crossed a small stream by one of these bridges shortly after leaving Chên-nan Ch'iao, and took a course almost due north during the entire day, having on our left a range of savage-looking and precipitous hills perhaps 2,000 feet above our average level, or 3,000 feet above the lowest parts of the plain. A road runs north-west from Chên-nan Ch'iao to P'ing Shan, across a conspicuous gap in this chain. We passed some exceedingly fine specimens of the *Pê-kwo-shu* or 'white fruit tree,' (? *Salisburia adiantifolia* or *Ginko biloba*), and also of the *Chin-p'i-shu* (? *Citrus microcarpae*). Before commencing the ascent to Yen-têng, a village 20 *li* from Chên-nan Ch'iao, we passed a magnificent specimen of the *Nan shu* (? *Laurus sutchuaniensis*), which threw its grateful shade over an immense area. The timber is often called teak; and many will entertain a vivid recollection of the colossal pillars of this wood which support the mausoleum of the Ming Emperor Yung-lo, the finest of the Shih-san Ling, or Ming Tombs of Peking. Several huge logs have been within quite recent years transported at enormous cost to Peking in order to complete the tombs of the Emperor Hien Fêng and T'ung Chih. The Sz Ch'uan boatmen usually build in or affix one strong beam of

this wood to the water line of their large cargo-carrying junks, in order that it may resist the bumps against the rocks. This beam is technically called the *la*. Cedars and firs were still to be seen in large numbers, but they by no means monopolised the hill-sides, as on the Nan-ch'uan road: the *Fung-hsiang* and the *Shui-ch'ing-kang* were quite as common.

After crossing another ridge at the height of 2,600 feet above sea-level we descended into a valley more barren than ever. Even the wall of hills to our left assumed a more yellow and sterile appearance. Some of the crags stood out in striking shapes, resembling in some places the 'Devil's Walk' of the Rocky Mountains: yet, wherever the brushwood had been cleared from the hill-sides, there the yellow earth in the interstices between the rocks had been turned up by the plough; and, wherever possible, had been sown with the poppy. The rocks lay upon each other in horizontal strata like enormous pyramids: in fact wherever the brushwood had been cut away sufficiently to enable one to get a comprehensive view of a mountain, this pyramidical appearance became more striking. The Chinese said there was no sandstone nearer than Fu Chou, and that all the rocks in the vicinity were *yu-kwang-shih*. The amount of cultivable land was certainly not greater in proportion to the sterility than in the pass between Braemar and Ballater; yet the patient Chinese managed to raise both rice and opium out of it. The plough used by the Kwei Chou peasant is a still more primitive structure than that used in the north of China. It resembles the letter V, slightly rounded instead of coming to a sharp point, with one shank shorter than the other. To the shorter shank, not more than three and a half feet long, is nailed the strong iron plough-share, which is slightly curved, and lies flat upon the ground like a trowel, about a foot long, by eight broad at its upper end. To the longer shank, about five feet long, is affixed a small movable cross-bar, six or eight inches long, and to this cross-bar the ox is tied by two rope traces made fast to a wooden hames brought round his shoulders. The man walks behind at the side, grasping in one hand the handle affixed to the point of the V, and works the plough both down and sideways, the centre of gravity being so placed that the ox pull-

ing straight ahead drags the share in a horizontal direction. With the other hand the man switches the animal. In paddy-land these ploughs dig up at least a foot of mud, but in dry lands not more than four or six inches. It is very rare to see a paddy-field or an opium-bed more than 100 feet square: all is in small, not to say tiny patches.

Beyond Yen-têng, we encountered two lofty red poles surmounted by the usual stage or basket-like terrace, two thirds of the way up, such as one invariably sees opposite the *Yamêns* or public offices of China. I looked about in vain for traces of a building to account for this strange apparition in a weird and sterile mountain region. It turned out that they had reference to the family grave-yard of a provincial graduate, about half-a-mile away up the mountain side; and the runners said that no one below that rank, except perhaps a *pa-kung*, had the right to place such poles opposite his family tomb. The whole country around had an exceedingly unkempt appearance, and the thorn hedges which (apparently in order to keep the cattle from the opium) hemmed in the road were a great nuisance. The sun was very warm, and the thermometer marked over 70 in the shade: not a cloud was to be seen in the sky; and, altogether, it was a great contrast to our experiences of the last ten days: the temperature in the sun was that of a hot English summer, but it was not too hot to walk without a sun-helmet. In this country, where there is no place for anything, and nothing is ever in its place, I remarked a strange custom of building *outside* the house a small cupboard opening *inside*, in which are deposited the basons or cups of the family. In the poorer districts these bowls (about the size of a small slop-bason) are the only articles of household crockery.

As we were walking along, basking in the sun, we met four men carrying poles, at the ends of which were made fast strings of cash; perhaps three or four dollars' worth a man. Some of our escort exchanged greetings with them, and remarked to each other that it 'must have been a good case.' These cash represented the 'squeezes' which the runners had made out of the litigants in the case. I inquired how it was worked; and one of the police informed me that two police were told off to each warrant, armed

with which they at once made for the defendant, and, having taken stock of his means, proceeded to make terms with him. If he paid well, he was allowed to go to court by himself, and the police obtained remands and delays to suit his convenience, concocting suitable reports for the magistrate's ears: besides this, he was not forced to pay for their entertainment *en route*. If he did not pay well, he had to travel like a criminal with the runners, to eat in their presence, and to pay for their living, besides being put to all sorts of petty harassing inconveniences such as Chinese runners alone are capable of inventing. If he were really poor and could not pay, then he and the police had to live in the cheapest of inns, on the shortest of commons, and it was 'a bad case.' I noticed in one place a proclamation warning the police against such exactions; habitually placed, it was alleged, upon not only defendants but also complainants and witnesses. Justice is thus too often practically sold to the highest bidder. From this the runners got to telling each other stories of cases they had had; of the executioner at Ch'êng-tu, who daren't go out after noon; how a sum of 500 cash was paid for every execution, whether decapitation, strangling, or quartering; how quarterings were never permitted to take place at Ch'ung-k'ing on account of the crowds in the narrow streets; how confessions were extorted by means of a rack called a *péng tsz*, and silence was imposed by means of a wooden gag forced into the mouth and called a 'beak.' They were good-natured fellows, these runners in my pay, well-fed and well-treated; but from the stories they told it was evident that, under their unhappy system, they were capable of as cruel extortions as any one. The abuse of 'justice' is possibly not entirely unintentional on the part of the Chinese Government. I think it is the Abbé Huc who quotes a decree of one Emperor (K'ang-hi or K'ien-lung) in which his Majesty says: 'I wish my *yamêns* to be dreaded by the people as much as possible, so that they may settle their disputes in a friendly way, and not worry the magistracy with their querulous disputes.'

We passed by a strange combination of bridge and temple, built across two huge boulders which almost obstructed a small river: it was only approachable on one side, and, tumble-down affair though it was, yet it was not entirely unpicturesque: it was

evidently connected in some way with the *fêngshui*, or 'luck' of the place. Having got to the end of the long unbroken stretch of sandy-looking mountains to our left, we turned north-east for five or six miles, and now we could see that the range still continued in a northerly direction, but was broken up into separate mountains divided by passes or narrows. On the west side of these hills were the market towns of Mou-mên and Tu or Chu-chia Pa. The road to P'êng-shui branches off north, as we turn north-east, and, after several fatiguing ascents and descents, finally mount to the village of Fên-shui Ya, at an altitude of 3,340. *Ya* is a local word signifying the low-lying neck or pass between two hills, but not so low as to form a defile. The 70 *li* this day were terribly long, and it took us twelve good hours to accomplish them.

Just above the village, in a commanding position, are the remains of the stronghold of the rebel Wang, who, in the year 1852, set up the standard of rebellion in this part of the country. Nothing is more striking in these remote districts of China than the entire absence of executive control. Military stations are few and far between, and are rather centres of gendarmerie or patrols than fighting men. Of officialdom there are only the magistrate and his secretaries and myrmidons in a district often as large as Yorkshire. Order is preserved in the villages by a system of *t'wan*, or *posse comitatus*; but, except when pressed by famine, or led on by some desperado, the Chinese do not seem inclined to quit their monotonous life of toil to become freebooters. Opium was the chief feature still; no slopes seemed too steep, no ground too barren for the poppy. I met a man carrying three cakes of the drug from market. It was done up in a paper about the size of Bath-bun and looked like cobbler's wax: the man asked 200 cash an ounce for it. The Kwei Chou drug is chiefly used in Sz Ch'uan mixed up with the native article, which is not so pungent. Our course to-day was chiefly north-east, up and down, over hill and dale, through the same rocky and sterile country, surrounded by the same trees, crossing the same ricketty bridges, and passing through the same slatternly hamlets, with slouching clodhoppers lounging around, and stupid-looking women at work in the fields. All the women squeeze their feet, but not in such an exaggerated way as in Sz Ch'uan: in fact, at times they look as if their feet are of natural size, and are

only swathed up in the conventional bandage and pointed shoe for decency's sake. Everyone is miserably poor, though at the same time there are few or no beggars; and everyone seems to have enough to eat. Shoes are a rarity, stockings quite exceptional. The universal foot covering is the straw sandal, made fast by a wisp brought round the heel, and steadied by another carried between the two largest toes. All the men wear short trousers, with the usual Sz Ch'uan bandage twisted a dozen times or so round the ancle and lower shin.

We were no passing through part of the district of Yin-kiang, and saw a proclamation by the magistrate upon the subject of violent robberies which, he recited, had been very common. Outside one house was a strange notice by an elder brother, warning people not to give credit to his younger brother, as he had taken to gambling, would probably turn thief in time, and come to an evil end; and disclaiming responsibility for him. Cho-shui Ch'ang on the P'êng-shui road is also approached from a point a few miles on this side of Fên-shui Ya, where the former road branches off north, and we continue north-east through plantations of varnish trees. These trees are cut once a year: the incisions in the bark are a sort of gash the size of a boy's hand, the earliest being made near the root, and then on upwards in one or two places each year. One incision will yield from half to a whole catty, which fetches 320 cash at Ch'ung-k'ing. I found it sometimes difficult to distinguish this tree from the mulberry and the *Aleurites*, the later of which was bursting into flower everywhere. The jute palm was very common too. Of mulberries there are the *ma sang*, used only for fuel, and the *tsz sang*, on which the hairless or tame silkworms are fed. The mountain worms only eat the silkworm oak, and, unlike the tame ones, are not themselves edible when the silk has been wound off them. In the district through which we are now passing the wild silk is not grown on account of the depredations of small birds. In the Tsun-i prefecture, whether it be that small birds are naturally rare, or have been killed off, they are not sufficiently numerous to interfere with the grubs on the trees. To-day we saw our first wild creatures in Kwei Chou in the shape of a couple of cock pheasants. Beyond domestic animals, magpipes, egrets, crows, &c., we had seen no bird, beast, or fish since leaving Ch'ung-k'ing. A sportsman would have a dull time of it here. We lunched at

T'ien-ngao K'ou, (3,200), 20 *li* from Fên-shui Ya, and here had an opportunity of witnessing the slovenly way in which houses are built. Four fir poles, the two middle ones higher than the outer, are placed in a row; and three similar rows are placed at distances of six or eight feet or more from each other, the spaces between representing the three future apartments. Poles or logs are then laid horizontally across the tops of these and cross-wise between them. There is no foundation; one pole may rest on a stone, another on a rock or on the soil, and if the stone wants steadying, then a tile, an old hat or shoe, or whatever first comes handy is added. If it is to be a barn, a roof is added, and all is finished: if a house, the spaces between the poles and logs are filled in with lath and plaster, which, as the logs become grimy in time, causes the houses to resemble (at a distance) the snug little black and white cabins of Cheshire. If it is to be a temple, gaudy colours are superadded, and a few rough carved 'josses' of wood or clay are set up. Doors seldom fit. Light is generally admitted by the door only; or perhaps a hole or a rough lattice serves as a window to the inner apartment. There is no chimney, and the floor is that of nature. The Chinese seem to be unaware that beams will support least when laid flat, and most when on their narrowest ends, and usually lay them square: consequently these soon bend from their own weight, and houses stand at every imaginable angle. Anything more woful or comfortless it would be impossible to conceive. And that is the best style of house. The inferior ones are a jumble of laths, stones, mats, wheels, mill-stones, old clothes, umbrellas, and refuse of all kinds.

We go down again 750 feet to Sin-lung Ch'ang, which, like every other place we have seen in Kwei Chou, is a tumble-down hamlet. Still the poppy, wherever it will grow: and near here I noticed several fine specimens of the *sha-t'ang* and *ch'ing-chiu* trees. Mao-t'ien K'ou is 45 *li* from Fên-shui Ya, and after leaving this place we mounted wearily up a gentle slope of rocky, barren hill-side for about three miles. The sun was shining pitilessly; there was no shade, and I began to think that the wet would be preferable were it not for the difficulty of carrying the chairs in the slush. When we had gained the top of this hill, we looked down into some very fine and wild crag scenery. It was now more evident than ever

that our's was now only a branch road across the mountains, the main road being that to P'êng Shui from which we had separated the day before. We now turn east, and after some more weary alternate climbing and descending to the north-east, finally find ourselves in a fatigued condition at Hou-p'ing, (2,540), a village perhaps a trifle superior to the average hamlets, and at present a military station of 130 men. On leaving Hou-p'ing the next day, we were informed that we should have to travel forty *li* without meeting with rice, and consequently all of us made a very uncomfortable meal before starting at five o'clock in the morning. For the first twenty-five *li* we travelled north-east and north through a silent, barren, and almost uninhabited country, where the only striking objects were a few specimens of the *nan mu*, distinguishable from other large trees by their small leaves and numerous coral-like branches. Turning south-east, we mounted 360 feet to a spot whence we could command a good view of the yellow-looking hills so characteristic of the northern part of Kwei Chou; and then went down again 1050 feet and crossed as best we could a small stream not provided with a bridge of any sort. Though everything was strikingly silent and sombre, there were numerous evidences that human beings were not far off, for the poppy occupied the best pieces of such land as could be wrested from the rocks, whilst the uninteresting paddy obtruded itself in all sorts of nooks and corners. A little further on we crossed, by one of the covered-in wooden bridges, a stream at 200 feet higher level than the last, and, after one or two more fatiguing ascents, and descents, were glad of the shelter of a pitch-dark room in the inn of the market town T'an-pa Ch'ang, (2,060), twenty-five *li* from our destination Wang-chia T'o. The sun had been shining fiercely all the morning, and on this occasion I felt grateful for what accommodation there was. The last part of our land journey was in a north-easterly direction, chiefly descent. Soon we caught sight of the K'ung T'an River, and passed through a small valley full of wheat; then we noticed how much more advanced the vegetation was; we passed the *t'ung* or *Aleurites* trees in full bloom, and plantations of the *Boehmeria nivea*, with several large *mung-tsz* trees, all signs that we were approaching the more prosperous land of Sz Ch'uan, and in a few more minutes we were in the inn of Wang-chia T'o, (1,205), 30 *li*

below Kung-t'an, the frontier town and *entrepôt* of the salt trade.

The sight of a genuine river, after so much toil and discomfort amongst the mountains, was very cheery and refreshing. We were now nearly 1,500 feet lower than our highest point during the day; but from this point my observations of the heights of places became useless owing to my having re-set the barometer to suit a lower level without having taken the precaution to note the exact point from which I moved the needle.

The descent of the K'ien Kiang, or, as it is colloquially called, the Kung-t'an River, or the Fu Chou River, (or, again, the Siao Ho, or Small River), is a most exciting piece of travel. For nearly the whole distance from Kung-t'an to Fu Chou it runs through a barren, rocky, and gloomy gorge, quite as impressive, I think, as any on the Great River; because the narrowness of the stream makes up for the more moderate height of the mountains, and leaves the same impression that would be made if both were doubled. I came down at what is called *p'ing shui*, or moderate water, when the level of the river is about 20 feet higher than at its lowest, and 30 or 40 lower than at its highest. The usual breadth seemed to be about fifty yards, though in some cases it was narrower, and in many much wider. I should think that it must at all times be very deep, for during the whole passage I do not remember to have seen a single rock in mid-stream, or any place which looked as though there were sunken rocks near the surface. The river is simply a vast sluice through which the muddy water tears along at a terrible pace. The average rate of the current cannot be less than ten knots an hour, even at moderate water, seeing that, though three days on the river, we were only in actual motion for twenty hours. Though in impressiveness the scenery—which for the most part consists of perpendicular rocks 700 to 1,000 feet high, with the sky between,—may not surpass the finest of the Yang-tsz Gorges, yet the rapids of this river are very much more formidable. Falls of three and four feet are very common, and I should say that in many cases we went over six and even eight feet sheer fall; but it is not easy to judge of this, as, of course, rapidly running water does not fall perpendicularly, and, moreover, it was necessary either to sit down or to hold fast

in passing some of them; added to which they were out of sight, *i.e.* as far as opportunity of examining them goes, before we could recover ourselves. The great danger in these rapids does not seem to be the chance of bumping against rocks, or running into eddies, so much as the risk of dashing against the precipitous banks of the narrow stream, or getting involved in whirlpools. I have never experienced an earthquake, but in descending these rapids I felt that peculiar sinking sensation which an earthquake is said to produce. Another danger, too, arises from the violent thumping of the waves against the bottom of the boat, as, driven along by the remorseless rapid, she tears through rather than over them. The worst rapid on the whole river is that of Kung-t'an itself; but this I did not see, as I started from a point ten miles below. Except at highest water, junks cannot ascend the Kung-t'an at all, and, even then, fifty men and two lines are required to pull up a junk of 20 tons capacity. Junks can, however, descend the rapid, under the conduct of pilots, at all times; but, so far as I could learn, cargo is nearly all transhipped at Kung-t'an, and hardly any junks pass the rapid at all. Between Kung-t'an and Wang-chia T'o, the place from which I started, there are two rapids called the Ta-yen T'an and the Siao-yen T'an. The first rapid of importance below Wang-chia T'o is the double one of P'ang T'an, which seemed to me to be a much more serious affair than any rapid on the Yang-tsz. Boats going up the river always travel in fleets of nine, and the crews of the whole nine lend a hand in dragging each boat up the rapids. And most extraordinary looking boats they are. They cost about 200 strings of cash apiece, with about five more for the masts, oars, and tackle. The stern is crooked, hence the name given to them (for they are all built on exactly the same model) of *wai p'iku ch'uan*. This crooked appearance is not at once observed on the port side, where the poop is highest, but on the starboard side the boats look as if they have been stranded or 'bilged in' some way or another. The sides of the junks are pretty straight from stem to stern, but the port side of the stern is curved upwards whilst the starboard side remains almost on a level with the bow. The port bow on the other hand is slightly lower than the starboard bow in order, I suppose, to 'carry off' the curve increased (or reduced) at the stern in each

case. Where the bottom of the stern begins to curve upwards it does so at the same time sideways, the continuation of the keelson, or the spine of the boat, running up to the top of the stern on the port side. The inner side of the bottom of the boat at the stern thus faces the observer who stands on the starboard side. The crooked branch of a tree is tied to the inner and upper corner of the stern, in such wise that one end, like half a hammer-head, lies horizontally over the poop; and the other end, like the handle of a hammer, supports the strain, being made fast to the exposed bottom. On the hammer-head reposes a Titanic rudder, which is simply a tree between 70 and 80 feet long, the thick end of which is manœuvred by the skipper from a bridge built high up over the cabin, and the thin end of which rudder, usually broadened a little by splices so as to present a flatter face perpendicularly to the water, reaches far away behind. Sometimes these trees are fairly straight, at others twisted and curved like a huge serpent. Not seldom this stern sweep is made in two parts. The fulcrum works round a wooden pin running upwards through a slit, or between two splices. The power of this machine must be tremendous, and one man works it from the bridge with the greatest ease. A coir rope, made fast to the bridge ends, is brought twice loosely round the thick end of the rudder to prevent its running away sideways if the hold of it be accidentally let go. At the lower corner of the poop, which is six or eight feet lower than the other, and also not so far back, there is another stern sweep 45 feet long. The reason (which no Chinese gives in the same way) for this peculiar configuration evidently is in order that the two sweeps may work quite independently of each other, the one above the other and behind it, so that, if one is rendered powerless by a whirlpool, the other is available. The stern, too, presents no broad face to waves striking the junk, whether upwards or sideways; and, in fact, this last is the usual explanation given by the Chinese. Beyond these two sweeps there is no rudder of any description; but a large oar worked by several men is occasionally used, whether as a steering apparatus or a propeller I omitted to observe. This oar hangs in readiness over the starboard quarter. In addition to the above-described sweeps, there is a bow-sweep 45 or 50 feet long running

over the bow, and worked by two men. The only means of propulsion down the river are four small oars, each worked (pushed) by one man standing in the forward part of the junk. The object evidently is to give steerage way, for I noticed that they stopped working when the current was slackest, and set too most vigorously when we were rushing madly along or turning corners. The boat itself is only 80 feet long, and may be said to consist of a hull and three huge rudders. Upward junks carry enormous coils of rope, of which they frequently require four at a time, two at the stern and two at the bows. The crews seem a hardy, but a miserably poor set of men. For nine-tenths of the way up there is not footing for a civilized human being; yet these men scramble half-naked and shoeless over the hardest rocks, tugging until their noses almost touch the ground, and advancing at the rate of about five miles a day. A month is the shortest time for a voyage upwards; and forty days when the water is very high or very low. When the highest water is temporarily swollen by freshets, they are often weeks waiting to get round a single corner. Where even they cannot find a foothold, there is nothing for it but to pull the boat up inch by inch by means of hooked pikes dug into holes in the rocks. With the exception of a few small sampans which ply for short distances up and down, there seem to be no junks whatever on the river but the salt craft just described. Of these there are about three hundred, which would give an average of about three boats a day up and down, supposing that each junk made four trips in the year. These junks convey upwards of three *yin*, or about 20 tons of salt, for which they receive fifty strings of cash. Putting the cost of feeding the crew at one string a man a month, and allowing two more strings a man for wages and incidental expenses, a crew of ten men would thus consume thirty out of the fifty strings, leaving twenty as profit for the owner. The whole of the upward freights would not amount to more than £12,000 a year, and the downward freights would not exceed half that amount. Thus, for £20,000 a year, a population of 3,000 boatmen is maintained; a large part of Kwei Chou is supplied with salt; and the riparian population is partly supported by what the boatmen buy. In case of wreck, the boatman loses his boat, and the Government its salt, the cost

of which is distributed over the other consignments, and added to their price.

The next rapid we passed was Fu T'an-tsz, below which I observed some vast caves, which looked as if a huge morsel of the mountain had fallen into or been eaten away by the river. I had noticed similar caves below the P'ang T'an, and I saw several more further on, nearly always just below the rapids. Up to this point the only living creatures we saw in the river were some stray wild ducks, which created as lively an interest amongst us as do gulls among the passengers at sea on the Pacific Ocean. The general course of the river was north-west, but it was by no means a straight one. The gorge opens a little at the village of Niu-koh T'o, where a very awkward rapid called Shih Pan seethes round an exceedingly sharp corner. Here we met with a very unpleasant accident. Just as incense had been offered up to the gods, and we had launched into the foaming cataract, the forward sweep was wrenched in two by the sheer resistance of the waves. It had only been joined in the middle by six long nails at least a foot in length, and these were whipped out like so many tooth-picks. A dead silence ensued, and everyone looked as though a catastrophe was imminent; but the old man on the bridge never moved a muscle, and I suppose it was by the help of his tremendous stern sweep that we succeeded in fetching up about a mile below. Here we lost a couple of hours in splicing the sweep, the outer end of which had in some miraculous way kept with the boat. If it had been lost, it is dismal to reflect how many weary hours or even days we should have spent bargaining over a few shillings' worth of wood. The slovenly way in which this bow-sweep was worked was enough to make one's hair stand on end. The men who worked it stood on a single plank which reposed, quite unguarded, upon two loose coils of bamboo rope. These coils had to be steadied with lumps of fire-wood; and, as the wood could not be removed, we had to fetch up twice in order to purchase forty cash worth of fuel: on the first occasion our halt was in vain, for the covetous villagers wanted a half-penny and seven-tenths instead of a half-penny and two-fifths a bundle. Well, to return to the bow-sweep, the men ran to and fro upon this miserable plank, which wabbled about in the most distressing way, and even threatened to disappear altogether, men

and all, when both of them happened to be at the same end. The risks these people will run out of sheer shiftlessness are absolutely marvellous. On another occasion the old man took the forward sweep for a time, and, during a lull in the current, sat upon the thicker end so as to lift the point out of the water. The next thing we saw and heard was a general 'scatter;' he had fallen asleep and dropped off; the sweep had plunged into the water and already turned the boat half round; the plank had jumped up at one end, and the old man was clutching and sprawling all over the place. On yet another occasion, also in coming down a rapid, one of the junior boatmen who was temporarily in charge of the bridge, let go the end of the long sweep, with which he was playing. It swept violently away, carrying the rope with it, and knocking him down: meanwhile the thin end was turning the boat in every direction but the right one, and it was as much as the other combined sweeps and oars could do to keep our head straight.

A mile or two below Shih Pan is the double rapid of Yüan T'an, a really awful cataract, in which I am sure no small boat could live: it nearly shook the bottom out of our junk, and we shipped several seas. Below this are some more caves; half a mile further on the rapid of Ku-i-tsz, and below this, on the right bank, a stream issuing out of an unearthly looking cavern. Then come the rapids of Liu-shui T'o and Hwei-shui T'o, above the hamlet of Wan-chüeh-tsz, where is another small opening in the gorge with a certain amount of cultivation. During this time the barometer had gradually and steadily gone up to the value of sixty feet, in view of which the fall in this river must be considerable; but at this moment it suddenly went down twelve feet, owing no doubt to some atmospheric change, so that I gave up attempting to ascertain the fall of the river by its aid. Without making any allowances for possible atmospheric variations during the voyage, I found the difference in level between Wang-chia T'o and Fu Chou to be about 400 feet, which would represent a fall of about two feet in the mile.

Below Wan-chüeh-tsz are a couple of corners forming a regular Scylla and Charybdis. No sooner have you with infinite pains rounded one than you are confronted by the other.

Looking back after having passed both, I saw that we were in a straight line with the river above, which performs two screw-like convolutions round these dangerous projections. The advent of a descending boat in this gorge or string of gorges is like the passage of a parliamentary railway train at home. Small boats shoot out here and there with passengers returning home from some fair, or bound for the lower river. It was with the greatest difficulty that we could keep them off by main force; for it seems to be a sort of understood thing on this river that, no matter who charters the junk, it is common property. When I boarded it at Wang-chia T'o, I found that there were already 130 sacks of rice, and about 40 passengers on board the junk allotted to me.

Just before arriving at the rapid of Mo-tsai, we passed the mouth of a small tributary river which runs from Cho-shui, (a place frequently mentioned above), but is not navigable. A noticeable object on the bank is a huge and solitary *hwang-koh-shu* amid universal barrenness. The rapid of Mo-tsai is very alarming, and the horror of its passage is increased by the savage aspect of the banks below, the rugged caverns, the volcanic-looking hollows, and a general unearthliness. I should mention that the Kwei Chou boundary on the left bank, (as Kung-t'an is on the right), is a spot called Li-hwo-yen, opposite the village of Niu-koh T'o where we came to grief. I am not prepared to say that no stream from the west joins the Kung-t'an river between Wang-chia T'o and Kung-t'an, because, it will be remembered, we crossed a small stream at the spot where we met the French priest, which was alleged to join this river at or near Wang-chia T'o. If it does so, it must be above Wang-chia T'o. According to the maps a considerable river runs from Wu-ch'uan in Kwei Chou to Kung-t'an. I saw nothing whatever of any such river: at Wu-ch'uan there is no running water at all. But, on reflection, it seems to me possible that at some periods of the year a small river might find its way along the level valley through the opening north which we had seen in the distance as we turned west. But in any case it is a mere brook, quite unnavigable, and has no practical connection with Wu-ch'uan. I was under the impression that I could have got a boat at Wu-

ch'uan for Kung-t'an, until I arrived at that city and looked in vain for water in all directions.

Above the town of P'êng-shui Hien is the rapid of Lan-chu T'o, having passed which place we fetched to for the night, delays and accidents having only enabled us to perform 200 *li*. Just below the town, we could distinguish amongst the hills the winding course of a tributary river from the north. It is navigable for 120 *li*, and runs down from the town of Yuh-shan Chên. There are three rapids to be passed.

P'êng-shui is a somewhat picturesque city, built, as usual, high up out of the river on the right bank. It was dark when I walked through the town, so that I had not much opportunity of judging its importance; but it is evidently a place of considerable trade, and a centre of communication between the towns on the right bank of the Kung-t'an River. I regret that I was unable on this occasion to visit K'ien-kiang, Yu-yang, and other towns, for I understand that the people are of a different type from that of the Ch'ung-k'ing Prefecture. They are stated to be more independent in their manner, much given to ferocious and bloody clan fights, (which the authorities are quite powerless to prevent), and less inhospitable to strangers than Chinese usually are. A very fine tea, called Kiang-k'ou tea, from the town of Kiang-k'ou lower down the river, is produced in this District, and enjoys a considerable reputation. I had a couple of pounds presented to me, and certainly found it a very superior article. The District also produces opium, but this year less is stated to have been planted than usual. The salt from the Fu-shun wells, which is conveyed by boat from Fu Chou for distribution through the Districts of K'ien-kiang, Yu-yang, &c., sells at P'êng-shui at from 48 to 50 cash the pound, being an advance of about 10 cash on the Ch'ung-k'ing prices. It appears to have a somewhat serious rival in the granular salt of Yuh-shan, an inferior kind selling at P'êng-shui for 30 cash, the suppression of which has recently been unsuccessfully attempted by the Provincial Government at the cost of grave popular riots.

Just below the city of P'êng-shui is the rapid of Kwan-yin Liang, a little lower down than which the river bends round a very difficult corner; then comes another rapid, the name of which

I omitted to ascertain; then the rapid of Hia-t'an-k'ou; then the rapid of Ting-chiang Ngai. A little further down is the village of Kan-kwo Ch'ang, below which is a double rapid called Hia-pien, the lower of which is very dangerous at lowest water, and was bad enough at this time. A fall of several feet was distinctly visible and sensible. The river now bends very decidedly to the west, and even to the south, its general course being south-west. We passed several wrecks at an awkward shingly corner, and learnt that in one case six passengers had been drowned. Boats meeting each other on this river are scanned with as much mutual curiosity as steamers meeting each other on the broad ocean. The upward cargoes seemed to consist chiefly of sugar and paper, though salt is the chief staple. Rice seems to be a profitable cargo downwards, for Fu Chou plants Indian corn after the opium crop has been gathered, only a comparatively small area being suitable for paddy. Our rice came from Yüan-ho Sz in the Sz-nan prefecture, 120 *li* above Kung-t'an, where it sells for 1400 to 1500 cash the 100 catties; at Fu Chou it sells for 700 to 800 cash the peck of 35 catties. Two pecks go to a bag or *kên*. The merchant paid 26 strings freight for 130 *kên*, or 200 cash for 160 catties, and as he would sell at a profit of five cash the catty, he would net 600 cash a bag, or 78,000 cash on the whole transaction, supposing there were no other expenses.

Shortly after this, we passed the frightful rapid of Sin or Ch'ing T'an, the worst at high water, (with the exception of Kung-t'an, and Yang-kwo Ch'i, the latter of which will be shortly described), on this river, as its namesake is the worst at low water on the Great River. The country now began to open out a little, and innumerable *t'ung-tsz* trees in full bloom adorned the banks. We turned for a short distance due south, the banks still opening, their steep sides covered with the silkworm oak, (here cultivated for fuel). We next passed through two seething torrents hardly deserving the name of rapids, and then went through the double rapid of Wu-kwo-tsz T'an. The country now opened out considerably, and the banks became decidedly less gorge-like and more beautiful. For a few miles we could refresh our eyes with the poppy in white flower, cottages, gardens, cabbages, and cultivation generally; until we came to Kiang K'ou on the left bank, 120

li from P'êng-shui, to which district city it is subject. I kept a very sharp look out for the river which, as it will be recollected, we had crossed in the wet at Ta-yü T'ang, a few miles from Chêng-an in Kwei Chou, where it joins with the river from Mei-t'an Hien, and which we had been told joined the Fu Chou River at Kiang K'ou; and, sure enough, there it was, but according to all accounts only navigable for 100 *li*. At Kiang K'ou the river takes a very decided turn from south-west to north-west, and then north. Opposite the town there is at least half a mile of rapid and seething 'chow-chow' water, which goes by the name of Hou-tsz Pao-'rh; and, after clearing this, you emerge into a fine broad river almost as considerable as the Upper Yang-tsz. The next place we passed was Tsung-tsun, a village on the right bank, opposite to which the pitching was so violent that I almost felt sea-sick.

We now come to a market-town belonging to Fu Chou, which rejoices in the name of 'Hankow;' just above this place is the bad rapid of T'u-lou-tsz. Still continuing our north-westerly course we enter another gorge, turn to the north, and pass the rapid of Kwan T'an. The country again opens a little, but is barren in the extreme. I looked in vain for some of the 'Man-tsz Tung,' or aboriginal dwellings such as I had seen on the banks of the Ho Chou River. It is remarkable that during the whole of my journey from Ch'ung-k'ing, to Nan-ch'uan and thence through Kwei Chou, I saw no trace whatever of these interesting dwellings. Nor did I hear or see anything whatever of any indigenous tribe, though I understand that Miao-tsz are to be found a little further east on the Hu Nan frontier.

The general course of the river from Kiang K'ou to Wu-lung Hien is north-west. Wu-lung is 80 *li* from Kiang K'ou, and 180 from Fu Chou, of which Department, though colloquially dignified with the name of *hien*, it is only a division, as Fu Chou itself is subject to the prefect of Ch'ung-k'ing.

A small stream runs from a gorge behind the town of Wu-lung, (right bank), and enters the river across a mass of rubble. The rapid opposite the town ran at an incredible rate: we simply shot by at railway speed; the fall, however, was not very perceptible. We now turn again west and enter the Yen-ching

Gorge, shipping a considerable sea as we do so. This barren gorge is ten miles long, and the formidable rapid of Yang-kwo Ch'i is at its lower end. I had heard that it was usual to discharge both cargo and passengers at this last-named place in the winter-time; but I made no enquiries on board, as I found that any indiscreet doubts expressed as to what ought to be done generally involved an extra money payment for doing it; besides, I half hoped we should boldly shoot the rapid, though I did not care to make myself responsible for the consequences. Turning a corner, we came in sight of the long and straggling town of Yang-kwo Ch'i, on the left bank, and were at once involved in whirlpools and rapids. I braced myself up for a great event, thinking that perhaps this was *the* rapid; but, although a nasty piece of water, it turned out that this was nothing at all, and we shortly fetched up. The passengers all got out, but still I remained immovable. At last, getting impatient, I ventured to 'draw' the imperturbable skipper by suggesting that we were fortunate in having arrived early enough to pass the rapid that afternoon. 'Yes,' he said, 'as soon as I have engaged pilots.' It then appeared that the owner of the rice had insisted upon no less than seven local pilots being hired at the enormous expense of 800 cash,—really a high rate, in these parts,—for a few minutes' work. An old gentleman, who had often conversed with me, stepped forward and said 'at' me: 'Please explain to him, as he is simple, and does not understand our language, that this rapid is no joke, and that he must get out and walk.' I think I should have risked it if our boat had not been so carelessly handled before, and had been more substantially equipped; but, on the whole, I thought the discreeter course was to get out and walk. The crew and the owner of the bags of rice remained on board, the rice man probably thinking that death could add no horrors to the loss of his property.

The rapid of Yang-kwo Ch'i is a roaring torrent about a mile long, which runs from east to west round a semicircular bend of rubble and shingle. There is nothing like it on the Yang-tsz. It does not seem, looked at from the adjoining heights, to be so much a steady volume of water heading down in one sweeping current as a broken mass rushing over a very uneven surface; but,

from the rate at which it runs, I imagine it must be a combination of both. Upward boats require forty men and four ropes, but of course they hug the bank. There is no way of closely examining the rapid without being in the boat, and consequently I can only give a very imperfect description of it. Having walked about a mile and a half to a point below a second formidable rapid called Hia-nien-liu-kwo-tsz, I waited patiently to see our boat come down. Two families named Shih and Tung have the monopoly of shooting *(fang)* these two rapids; and, either by custom or law, no other persons are allowed to take boats down. I could not see the start, nor anything that took place at the upper side of the half moon, but a cry from the numerous observers soon attracted my attention to our junk which seemed to be almost literally flying round the corner. All sorts of sweeps and oars were plying with the utmost vigour, whilst the single pilot on the bridge could be discerned steadily manœuvering the seventy-foot rudder. Suddenly the junk gave a sinking plunge, and her bows almost disappeared from view: the spray shot up on both sides, and she mounted and sank again, reeling from side to side. The worst was evidently over, for there is only one really great plunge, which at this time of the year is at its best; but at low water is stated to be of terrible height. The junk once more disappeared beneath the hill on which I was standing, and was then deftly brought to between this rapid and the lower one, so that I had to trudge back half a mile. It turned out that the lower rapid, though a formidable affair, was not dangerous, and did not require the assistance of local pilots. When I got on board, I found the crew engaged in swabbing and bailing, so that I have no doubt the junk shipped many a good sea, as in these parts no swabbing is done for cleanliness sake. The pilots were of course squabbling about money, but on the whole they seemed pretty well satisfied.

The rapid of Hia-nien-liu-kwo-tsz, which we passed early the next morning, resembles the Yeh T'an of the Yang-tsz; it is simply a huge volume of water rushing through a narrow space: but the fall seemed to me much more considerable. It could not have been less than six feet. We now enter another short gorge, at the further end of which the hills suddenly change in colour to the red look which distinguishes what Baron von Richthofen calls

the 'red basin' of Eastern Sz Ch'uan. All the way from Kung-t'an the mountains had appeared to me to be igneous rocks, with a superincumbent stratum of about 200 or 300 feet of yellow sandstone. In many places they resembled the rocks of the Wu Shan gorge, and the stone was full of steam-holes, and was apparently of extreme hardness.

Continuing our course west-north-west, we passed the very picturesque town of Pê-ma on the left bank, and, turning north, went down the very slanting rapid of the same name. We then entered another exceedingly fine gorge, with less precipitous banks, and numerous coal workings on both banks. We pass one more rapid, and for the first time see junks *not* on the crooked-stern pattern, which come this far up the river for coal. It is said that, when the Yang-tsze is at its highest, it drives the Kung-t'an river back as far as Yang-kwo Ch'i, up to which place the junks can go with the current. We now pass the rapids of Kou-lou Kwo and Pien-t'an, the latter a double one, the lower division of which is a startling fall; and shoot past the village of Hia-pien T'an on the left bank. A little further down, a small stream, running from Ya-tsz T'ang to the west, and navigable by sampans for 30 *li*, joins our river. We turn north-north-east, pass more coal workings on the precipitous mountain sides, descend the rapid of Hiang-tsz T'an, and come upon a fine open river at Li-sz-tsz, opposite to which it is for some distance quite as broad as the Upper Yang-tsze. Here we passed several upward junks painfully progressing with three tow-lines out. Hitherto, although we had seen numerous fleets of nine at anchor, we had never met more than one whole fleet in motion.

The river turns north-west again at Ch'ên-chia Tsui, with Pê-t'ang Ch'i opposite, and about here, as the warm sun shone down, the country looked really lovely, with its (comparatively) gently-sloping banks, covered with the white poppy, the cream-coloured *Aleurites*, the golden rape, the feathery bamboo, and the light-green silk-worm oak. Turning more west, we pass over the two rapids of Shui-pa Ngai, and enter the picturesque Parrot Gorge, (En-ko Hia), on the left bank, near the entrance to which is a remarkable rocky basin which receives a small waterfall, and the water in which appears to be lower than the river level. The

peach-trees on the high slopes have cast their flowers, and are now well on in leaf. Turning again more north, we emerge from the gorge at Pia (pê) Ngai, and now go a little to the eastward. The country is most peaceful looking and beautiful, the very picture of agricultural prosperity. One more turn to the north, and then to the north-west, and we come suddenly upon Fu Chou on the right bank of the Yang-tsze and the left bank of the Kung-t'an River; but the latter is wild to the very end, and we must clear the Chi-tsz T'an—the last rapid—before coming to anchor.

Fu Chou, like Mu-tung, is at the apex of a bend in the Yang-tsze, which receives the Kung-t'an River from the south, and runs north-east towards the sea. It is the capital of an extremely populous Department, containing it is said 3,000,000 souls, mostly poor and engaged in the poppy cultivation. Like all Sz Ch'uan towns, the Department city is comparatively small, the population not exceeding, apparently, 30,000 at the outside. As usual, you must be carried up long flights of steps before you are well into the town, which contains at least one good long street, with shops little inferior to those of Ch'ung-k'ing; perhaps on a par with those of Shanghai Hien. All the rest of the town is mean, and, of course, dirty. Fu Chou is famous for the *liqueur* called *lu chiu*, already described. Its trade is insignificant, beyond its great opium business, which, including the surrounding districts, amounts to Tls. 2,000,000 a year. It is the chief market in Sz Ch'uan for the opium of the Province. The *wai-p'i-ku* boats from the Kung-t'an River halt here, and rarely make their appearance on the Great River. Numerous long salt junks from the wells above Ch'ung-k'ing are at anchor opposite the town, but the greater part of them anchor at Li-tsz Yüan, about three miles higher up, in order to prevent peculation. At this place the Governor-General has just built some very large, handsome, and airy salt warehouses, which have almost the appearance of moated fortresses. The main part of the salt brought down is intended to be stored here, in order to save the time of the junks. As the Government receives applications from the Fu Chou distributors, the salt is consigned to the city, or transhipped into the crooked-sterned boats for Kiang-k'ou, (thence overland into Kwei Chou), P'êng-shui, and Kung-t'an.

There is little to be said of the overland journey to Ch'ung-k'ing except that, at this time of the year (spring), it is one almost unbroken mass of poppy for the first fifty miles. The people had already lanced the capsules, and I was just in time to see them collecting the juice. Further on towards Ch'ung-k'ing, the poppy was later, and not yet lanced: in some places not even in flower. The lancing is done with a four-bladed copper knife, in appearance something between a cat's paw and a curry-comb. If the capsule is cut in the early morning, the juice is scraped off in the afternoon; and, if lanced in the evening, then scraped off the next morning. In this state it sells for from 70 to 90 cash the ounce. After being aired, 'sweated,' and allowed to settle, it is reduced by one half in weight, but increases two-fold its value; and it is in this condition that it is sold to the trade, usually in saucers, but often packed to suit the taste of each centre of demand. That part of the Department which is on the other side, the left bank, of the Great River, also produces a great deal of opium, especially the market-towns which cluster round the Sub-department of Ho-yü P'ing.

We kept pretty near the bank of the River as far as Lin Shih, where there has been just completed the finest bridge I have ever seen in China. It has cost the inconceivable sum of Tls. 260,000, or nearly £80,000 sterling, contributions having been sent from all parts of the Province. The small stream which, it will be recollected, we crossed on approaching Nan-ch'uan runs under this bridge. I should think that the length of this structure could not be less than 200 yards, and the breadth than 80 feet. The griffins, dragons, and other sculpturings which adorn it would not disgrace the museum of Naples, and the bridge itself would certainly do credit to the Seine at Notre Dame de Paris. It consists of three arches, is perfectly level, is built entirely of granite, and presents no apparent engineering or architectural defect. It certainly speaks well for the public spirit of Sz Ch'uan that the people are willing to sacrifice such a sum for beauty's sake alone,—for the bridge (unless, perhaps, during the summer floods) is quite an unnecessary piece of workmanship. It also confirms what I have already suggested, that the produce of the enormous crops, which lends no look of prosperity to the

timid people, is largely invested in impermeable enterprises of this sort which cannot be the subject of exaction. We crossed many other fine bridges on the road, too, but nothing in comparison with this one. Lin-shih is a considerable market-town belonging to Fu Chou, and as prosperous looking as the inhabitants dare make it. Tobacco shoots were being transplanted in some of the few patches not occupied by opium, and here and there water buffaloes were to be seen labouring through the slush of the paddy-fields with a plough at their tails. The maintenance of these brutes amounts to 4,000 cash a month, or at least double of what is required for a man: they live entirely on paddy stalks and grass.

There is some rather serious climbing to be done after leaving Lin Shih, thirty *li* from which is the market-town of Chin-ts'ang Ya, where we arrived in an exhausted state at nightfall. The first part of our journey had been very wet and slushy, and the second very hot, so that the thirty miles made was not a bad day's work. During the night I was robbed of some useful and expensive fur-covered clothes.

On these highlands there was much less opium, though still the poppy was the main feature of the landscape. Maize and buck-wheat were being sown as autumn crops, and cucumbers transplanted. The next day's march was exceedingly arduous; and besides being of unusual length,—over 100 *li*, or nearly 40 miles,—was especially fatiguing to me on account of the burning sun, and the effects of the comparative sleeplessness of the preceding night. The rats and vermin had disturbed me more than once; then I found people were peeping at me through the window, from the roof, through the crevices, and so on;—possibly the thief was amongst them, taking stock of my effects; and, finally, the robber roused me up twice, besides waking me permanently at half-past three in the morning to take steps for the recovery of my property. I walked the whole of the distance, with the exception of half a mile or so after breakfast, and consumed quart after quart of boiling tea,—the only liquid which it is safe to drink in this comfortless land. We sighted the Great River at Yang-lu K'ou, from which place we had to descend once more, and then mount another weary thousand feet or so

to a *col*, from whence we could distinguish our old friend Mu-tung, five miles away. It was very cheering to see something we had seen before, and everybody's spirits rose as much as it was possible to do, under so much fatigue, and after so many privations. I occupied my old room and my old bed at the same inn; and, in looking for a convenient place whereon to drop some candle-grease whereon to make the candle stick fast, discovered the identical grease I had left on the bedstead a month before, and which, with its increment, will probably remain there for many a long year to come.

And now we commenced our last day's march, another toilsome thirty miles. It seemed quite homely to meet people coming from Ch'ung-k'ing with loads of produce of all descriptions. The villages we passed, filthy though they were from an English point of view, were immeasurably superior in size and substance to the ricketty hamlets of Kwei Chou and the frontier territory. The novelties of the day were a species of wild raspberry, called the *kwang p'ao*, and a variety of wheat called *lei-kung mê* or 'thunder-god wheat,' quite different in appearance from the ordinary spiked variety. The rape had lost its flower, and taken the form of a small drooping bean, fields of which had the waving appearance of a sea. Peas and beans were nearly ripe. After a tiffin in an inn, so filthy that I was obliged to walk from couch to couch in order to avoid touching either floor or table, I indulged in an hour's ride in my chair, the first long ride for three weeks.

The last five miles up the hill was the most punishing part of all our journey. On arrival at the summit, our party was quite demoralized: no one spoke; everyone lay or sprawled about in a limp and exhausted attitude, and gulped down bowl after bowl of tea. When they are very fatigued I notice that Chinese porters prefer a mixture of coarse brown sugar and tepid water to boiling tea. And now we crossed the ridge and came in view of the picturesque Ch'ung-k'ing, far away down below, with the winding Yang-tsze, and the once clear but now muddy Ho Chou River embracing it on three sides. The excitement caused by the imminent approach of home comforts caused me to omit to take the height of the pass opposite the town, and to notice the difference in the level of the River, which had much swollen since my departure a month ago.

UP THE KIA-LING RIVER.

The Kia-ling, locally called the *Siao Ho*, or 'Small River,' enters the Yang-tsz between the town of Ch'ung-k'ing Fu on its right bank and that of Kiang-pên T'ing on its left, the latter being a walled city carved out in the year 1731 from the District of Pa: Pa *Hien* being, in fact, Ch'ung-k'ing, the Prefectural and the District Capitals lying within the same city walls. At low water nothing could be greater than the contrast between the limpid waters of the Little River and the yellow mixture of the Kiang,* or Ta Ho. Both towns are, at the winter season of the year, perched high up on rocky eminences and (always at a distance) present a most picturesque appearance. Enchantment vanishes with propinquity, for, of all the receptacles of ungodly smells, Ch'ung-k'ing probably bears the palm for intensity and diversity. Casting a longing eye on the enticing waters of the Little River as I pursued my solitary walk among the dung-hills of Ch'ung-k'ing, I determined to plunge myself into them without delay, and that right frequently. With this object in view, therefore, (though I will not deny that I had other and more serious motives), I hired a small *kwa-tsz ch'uan* or compartmented travelling boat, and started up the river for a week or two's cruise, exchanging personal cleanliness and vile smells for personal slovenliness and fresh air. I visited the town of Kiang-pêh before starting up the river, but found nothing whatever of new interest in the place, except perhaps an odour or two of more subtle malignity than those on the other side. Neither Blakiston nor Gill appears to have quite succeeded in establishing the proper identity of Kiang-pêh T'ing, which is usually marked on the maps as Li-min-foo. This is the title of *t'ing* or Sub-prefect, and, when people say that such and such a village is 'under the Li-min,' they do not mean under the city of Li-min (which does not exist), but under the Sub-prefect of Kiang-pêh. Several examples are given in Mayers' *Chinese Government* (No. 282) of similar special titles adopted by or conferred on certain sub-prefects.

About a mile up the river, on the right bank, is a huge

* From here to Ch'êng-tu it is properly styled the Min Kiang.

far as its junction with the K'ü Ho, a boat appeared the most desirable mode of conveyance, especially as there were numerous objects of interest to be seen on the river. The first of these is on the left bank, about seven miles from Ch'ung-k'ing, after the river has taken two turns, and hidden from view by the hills on the right bank of the Great River. Not a hundred yards from the shore, and perhaps a hundred feet from the winter level of the water, are to be seen four or five perfectly square and regular holes carved out of the solid rock. These are locally called Man-tsz Tung, and are stated to be the dwellings formerly occupied by the aboriginal inhabitants, whilst yet Sz Ch'uan was covered with impenetrable forests.* But the remarkable thing is that savages, who could not cut down trees to build themselves a hut withal, should have been able to carve out with such patience these dwellings in the rock. They are all on the same model, and the doors have the appearance of square tubes telescoped one within the other, each tube receding inwards six or eight inches from the next outer, and the withinmost aperture being about four feet square. One or two of them are adorned round the mouth with rough *guilloche* and trellis patterns, figures of naked men, deer, cocks, &c., carved into the rock, and, rough though they be, certainly have a non-Chinese appearance. A fragment of broken rock, lying near the mouth of one of the caves, has carved upon it what looks like a *quipu*, or perhaps an English genealogical tree. It is possible that blocks of pyramid-shaped stone may have fitted into these caves in the guise of doors; and most impregnable strongholds they would be, (for they are flush with the rock, and from five to ten feet higher than the nearest foothold), if only it were explained how the inmates obtained food and air during a siege. The chamber within was in no case more than eight feet square, and about six or seven feet high, the inner face of the roof being concave, and a sort of gutter being chiselled round the floor. A mile or two outside the T'ung-yüan Gate of Ch'ung-k'ing there are numerous other similar caves, hollowed out of the ground rocks. Some of them are

* The saying *hu shuo pa tao*, or 'gibberish!', is said by some to mean the *shuo*, or 'talk,' of the *hu*, or 'Tartars,' and the *tao*, or 'speech' of the savages of *Pa*, or Ch'ung-k'ing.

occupied by beggars, and others have been utilised as tombs or vaults, and bricked up. These are much more extensive within than the caves of the Little River, but the square and telescopic doors were in all cases carved out on the same pattern. The stone invariably bears the marks of a chisel or celt, like flagstones which have been 'roughed' for the convenience of pedestrians; but the marks are hardly incisive enough to have been made with an iron chisel. In some cases the Ch'ung-k'ing caves have recesses like bed-places at each side, and holes in the wall, for lamps perhaps, with occasionally a trough-like or stove-like hollow near the door. In one or two instances neat patterns are carved on the ceiling or inner roof; and, altogether, an amount of labour and care seems to have been spent upon them altogether incommensurate with the humble office of lodging a dirty savage and his squaw.

A considerable traffic is done on the Kia-ling River, the most important downward being the official salt cargoes from T'ung-ch'uan Fu in the north of the Province. The places in that Prefecture which produce salt in large quantities are Shê-hung Hien, P'êng-ch'i Hien, T'ai-ho Chên, and San-tu K'i. There is not so much obtained from these wells as from the celebrated pits of Fu-shun and K'ien-wei, the borings at which have been so often described by European travellers; but still the trade is very vast, and is now entirely in the hands of the Provincial Government, which has established a system of 'official conveyance and private distribution' as yet hardly in working order. I was surprised at the length of some of the downward junks, which were certainly 150 feet from stem to stern. I was told that many of them carried from 120,000 to 130,000 catties of salt, which would be about 80 tons. Subsequently I saw a number of them being built at Ho-chou, and was informed that the cost was about Tls. 200 for the hull, or Tls. 300 with apparatus complete. They are built in twenty or thirty compartments, each separated by a bulk-head; and, when pretty deeply laden, do not draw more than at the utmost four or five feet; for their bottoms are perfectly flat, that is to say as regards the contact with the water, as they slope gently from stem to stern very much in the manner of a Brazil-nut. Sails are unknown on this river, except in the case of the smallest junks. The large junks have no use whatever for the mast but to

slip rings up and down it for the towline. The reason why sails are not used to ascend the river probably is that its tortuous course would make it impossible to run before the wind for more than five minutes at a time.

So far as I could make out, the chief upward cargoes consisted of *t'ung* oil, which rather surprised me, as the *t'ung* tree grows almost everywhere in Sz Ch'uan. The oil was packed in bamboo hampers of 180 to 200 catties apiece, and I was told that the price was something over 5000 cash for 100 catties; say twopence a pound.

The *T'ung-tsz Shu*, or *Wu-t'ung*, is usually described as the *Elæococca vernicia* or *verrucosa*; but, according to the highest botanical authority, is more correctly termed *Aleurites vernicia*, Hassk. This tree flowers in the month of March or April, and produces the fruit a month later. It is plucked about September or October, and allowed to rot in heaps covered over with grass, in order that the kernel may be disengaged from the shell or husk. The *T'ung-shu* grows in hilly places all over the Province of Sz Ch'uan; but half of the whole production is stated to come from the eastern portion, three-tenths coming from the southern districts, and one-tenth from each of the western and northern parts. Of the half total produce of the eastern portion, one-fifth comes from Fu-chou, P'éng-shui, and the Kung-t'an River; one-fifth from K'i-kiang and the border of Kwei Chou Province;* one-fifth from Liang-shan, Tien-kiang, Wan Hien, and Chung Chow; and the remainder from the other districts. The nuts are distinguished into three varieties, the yellow, drab (*ma*, or hemp-coloured), and white; the last affording the greatest quantity of oil. The price of the white variety is about nine hundred cash the (double) *tou* or gallon, being one-tenth of a (double) picul. The two other varieties are about two or three per cent. cheaper. There is no market for the nuts at Ch'ung-k'ing, the crushing being invariably done locally; nor is there any tax upon them *in transitu*. The husks and, in places where there is no crushing industry, the nuts themselves, are burnt for potash, the other sorts of potash in use being obtained from pulse, and from

* Not to be confused with Kwei Chou (Department).

grass, the best grass being the *ma-pien ts'ao*, (? *Verbena officinalis*, Linn.). The cake, after the expression of the oil, is used extensively as manure, as are also the husks, where not utilised for obtaining potash. The oil manufacture of Sz Ch'uan is not so extensive as that of T'ung-jên Fu in Kwei Chou Province, but still it is very considerable, the neighbourhood of Fu-chou monopolizing the greater part, Wan Hien and Chung Chou coming next. The value of the oil at the place of manufacture is usually about 4500 cash the ordinary picul. The cake manure is chiefly esteemed in the cultivation of the best tobaccos in the north parts of Sz Ch'uan. It is sold, by the trade-scale of 105 catties to the picul, at the rate of about five mace, or 700 cash. There are two varieties known as the autumn (*ch'iu*) and fire (*huo*) cake, the latter containing less oil and being a trifle cheaper than the former. The chief export of oil to Hankow seems to be from T'ung-jên in Kwei Chou, by way of Ch'ang-tê, and is mostly in the hands of Kiang Si men. The country people take it to the T'ung-jên market in loads (*t'iao*) of two wicker baskets (*lou*) a load, each basketful weighing 80 catties. At the Hankow market, the seller has to pay 2½ candareens a basket 'hong' charges; and the custom of the trade is three or four months' credit, (*mai kwei*,) or discount for cash. Two candareens and a half of taxes are collected on every basket at each of T'ung-jên, Ch'ang-tê, and Hankow. The T'ung-jên trade amounts to over Tls. 400,000 a year, and that of Fu-chou to half as much again. The Sz Ch'uan baskets are of two sizes, one containing 280 catties, and the other 180. The export duty is two mace four candareens on each large basket, and 100 cash extra if it passes Ch'ung-k'ing on its way down. The freight to Hankow averages about 1,000 cash for large baskets, and 700 for small, the selling price at Hankow being about Tls. 5 the picul. All oil entering the walls of Ch'ung-k'ing has to pay to the oil-market a tax of two mace four candareens. The business is transacted entirely through brokers, who receive from the seller 1,000 cash commission on every Tls. 100. The chief uses of the *t'ung* oil are to varnish boats, feed lamps, varnish houses and furniture, make umbrellas and water-proof cloth, and manufacture the best ink. This is done by obtaining the soot resulting from the combustion of lamp-wick grass, (*têng-sin ts'ao*? *Cyperus difformis*, Linn.), and *t'ung* oil in a

small furnace. Of late years it has also been used for building forts, forming with tripartite earth (*san-ho-t'u*) of lime, sand, oil and clay, a material almost as tough as granite. In the District of Nan ch'uan there are said to be two sub-species called the *t'êng* (or ivy or? cane) *t'ung*, and the *zz-li* (or prickly ?) *t'ung*, the latter a small tree, the fruit of which has only two 'figs.' The other kinds have four, six and eight 'figs,' or lobes, each containing two kernels. The nuts are also distinguished into the round (*t'ao tung*, *i.e.* 'peach' *t'ung*), and flat (*shih-ping*, or 'persimmon cake'). The flower of the white nut is white, that of the yellow nut red, and that of the mouse-coloured (*ma*) speckled (*tsa*).

The crushing of the *t'ung* oil is done in the following way. The kernels, having been removed from the husks, are first ground in a stone mill, (*nien*), and then steamed in a wooden tub, (*tsêng*), until they become soft. They are in this condition placed within 24 iron hoops, about 18 inches in diameter and half an inch in thickness, and separated from each other by about one inch, the whole resembling a huge screw or sausage. This is then placed horizontally in a sort of hollow horse or strong wooden frame called a *chia*, and an arrangement of wooden blocks and wedges is laid across one end of the sausage, the other resting against the inner end of the horse. Two of the wedges are very much longer and stronger than the other blocks, and are strongly capped with iron at the ends facing the operator. One, thick at the inner and very thin at the outer end, is driven in so as to compress the cake; whilst the other, thick at the outer and thinner at the capped end, is used to release the cake when ready. A battering ram, strongly capped with iron, swings from a beam of the building running at right angles to the direction of the ram, and parallel to the direction of the horse with its sausage-like contents. A man swings the ram, (*chwang kan*), twice or thrice backwards and forwards, and finally brings down its heavy cap with great force on to the iron head of the wedge, which, advancing, of course tightens the blocks and squeezes the pulpy mass. The oil drops down into a sort of gutter, (*chien*), running round a basin or cistern, and is conveyed away by bamboos to other receptacles. Twelve cakes, each about 1½ inches in thickness, and weighing each about 14 catties, are taken from the 24 iron hoops. Before

use as manure, these cakes are once more triturated. The local retail trade in the *t'ung* oil is conducted at the rate of twenty ounces to the pound. Rape oil is manufactured in the same way as the oil above described.

The river takes another bend at the Caves; and, three miles further up, you come to Sha-p'ing Pa, where the *Missions Etrangères* have their sanatorium. This is a vast mansion, covering perhaps two acres of land, which was built not many years ago by a wealthy merchant named Chang; but, becoming haunted by devils, it proved both uninhabitable and unsaleable,—that is, from a Chinese point of view. It must have cost Sir Chang a matter of Tls. 15,000 at least; for there are four or five large courts, scores of out-houses, gardens, ponds, bridges, and what not. Yet the French Missionaries obtained it for Tls. 2,000. As they were good enough to place a room at my disposal, I passed a few days there; and, though certain unearthly and weird noises were heard occasionally in the dead of the night, I did not find the devils at all in my way; and moreover, if I had, was fully prepared to 'go for' them.

You join the road which leads to Pi-shan Hien, a mile or so from Sha-p'ing Pa, and I made an excursion to the coal mines dotted around a high mountain called Ko-lo Shan. They were occasionally worked, along with lime-stone quarries and occasionally without them. Some of them produced as much as 900 loads, or hundred-weights, a day; but I found it exceedingly difficult to obtain accurate figures from anyone. The people around were about the most suspicious-looking and stupid that I ever met in China, and seemed to have no ideas beyond their native hamlets. Moreover, the Sz Ch'uan people, of this neighbourhood at least, though quiet, are said by their own people to be most notorious liars and cheats; hence the epithet *Chuan Hao-tsz* or 'Sz Ch'uan rat,' now applied to them by other Chinese. They evidently thought that I was on the look-out for gold or precious stones, (as far as they were capable of thinking at all); and in fact one man asked me if I could see through the ground, or through the water of a river. The mines were all dug horizontally into the mountain side; but as there were no intelligent workmen to explain operations, I did not dive in.

There are several kinds of coal and charcoal used at Ch'ung-k'ing. The most ordinary kind is the Ts'z-ch'i K'ou coal, so called from the place above described, whence the fuel comes. The price of this at the mines is 130 cash for a load, (*t'iao*), of two measures, (*tou*), of lumps mixed with slack. The *tou* weighs 40 catties. At Ch'ung-k'ing the price is 150 cash the load, or three cash for the catty of 20 ounces* retail. Another soft and smoky sort from K'i-kiang district is called Wêng-yao, and, offered for sale after having been freed of its volatile and bituminous matter, appears to be nothing more nor less than coke. This sells at Ch'ung-k'ing at from four to five cash the large catty. A third sort, called *T'ieh mei*, or 'iron coal,' also from Ts'z-ch'i K'ou, costs at Ch'ung-k'ing 160 cash the load, and is the kind which blacksmiths prefer to use, being less smoky than the first-named. A fourth description is the *Pê mei*, or white and smokeless coal from Yung-ning, near the border of Kwei Chou. This is only sold wholesale, at the rate of about 3,000 cash the 1,000 catties, and is used by confectioners. Owing to difficulties of transport, the demand is much greater than the supply. The fifth kind is the *Chi-kwan t'an*, from a place higher up than Ts'z-ch'i K'ou, on the Little River. The price of this at Ch'ung-k'ing is 150 cash for slack, and 280 to 300 cash for large lumps. It does not smoke very much. In Sz Ch'uan the word *t'an*, 'charcoal,' is usually used alone to signify coal, but *mei-t'an* is not uncommon. Oak (*Ch'ing-kang*) charcoal, called *Kang-t'an*, costs from 15 to 20 cash the catty, accordingly as purchased wholesale or retail. The retail catty is 16 ounces, and the wholesale 20 ounces. Charcoal from other woods is called *P'ao-t'an* or 'soft charcoal,' and sells at about 11 to 13 cash the catty, always of 20 ounces.

About twelve miles above Wan Hien, on the right bank of the Yang-tsz, the people said they paid two cash a catty for their coal. I saw lime and coal workings together, on the left bank, a few miles east of Ch'ang-shou. Near Pa-tung in Hu Peh, the coal was mixed with water and moulded into circular bricks, (*T'an Yüan* or *Wan*), sold at a cash apiece. A cash a catty was the lowest

* Note.—In Sz Ch'uan weights and measures vary with almost every kind of produce.

price I heard anywhere mentioned. Roughly speaking, then, coal may be purchased anywhere from I-ch'ang to Ch'ung-k'ing for from $2 to $3 the ton. The numerous rich coal mines near Ch'ung-k'ing, owing to the prohibitive cost of coolie transport,—100 cash the load, or at the least $3 a ton,—are mostly unavailable for any but purely local trade. Everyone at Ch'ung-king burns coal. The average consumption by each family for cooking purposes is ten loads a month. The population, as taken at a rough census a year or two ago, was somewhat under 80,000 males, and somewhat over 80,000 females; but as 600 piculs of rice are required for the daily consumption of the town, and as each nominal picul weighs 400 catties, this would make the population, at the rate of one catty of rice *per diem* ahead, to be 240,000, or say 40,000 families; but it is considered that there are not more than 20,000 families, which would give 200,000 loads of coal a month or 2,400,000 a year. This would amount to about 100,000 tons, at 80 catties the load, a regular catty being 1⅓ pounds avoirdupois. The bitumen, sulphur, and gas extracted from the *Wêng Yao* coal do not appear to be utilized in any way.

The boatmen on board the boat which took me up the Little River burnt a sort of coke which they said came from Kiang K'ou, and which was evidently K'i-kiang coal. They had bought 100 catties of it for 320 cash at that place, which they had just passed on their road from Lu Chou, and it had lasted them 13 days; that is, they were able to cook all day long for six or eight persons for one penny a day. This coke does not smoke at all, and keeps up an excellent heat in the little clay barrel-like furnace standing in a recess at the bow of the boat. On my way down the river, I noticed that they purchased one *tan* or 30 catties of what they called *Yen-tsz T'an* or 'smoky coal' at a place called T'ung-chia Chi, or Erh-t'ang, just below Chi-kwan, and for which they paid 90 cash. This coal resembled very much the *Yen Mei* or soft coal of Peking, and was a great nuisance to us all, on account of its smoke. The same coal in the form of slack was 80 cash. The short water journey of 20 miles to Ch'ung-k'ing, they said, raised the price to 120 and 130 cash. Such are the difficulties of conveyance in this part of China, that what is an expensive luxury in one town

is frequently a superfluous and unsaleable commodity a few leagues off.

The mountain called Ko-lo Shan caps the area of the coal mines in the region of Ts'z-ch'i K'ou. It derives its name from the joyous music made by the movement of the magnificent trees which once covered its summit. Now alas! it is completely bare, and the temple is in ruins, the present priest having debauched his substance, and flung away his last tree in harlotry and gaming. The English missionaries at Ch'ung-k'ing occasionally spend a few days amid the airy ruins in order to avoid the heat and stenches of a city summer. In Sz Ch'uan a great deal of land is held by Buddhist priests, who at the close of the Ming Dynasty, (1644), and after the devastation produced by the arch-disturber Chang Hien-tsung, proceeded to take possession of and enclose large areas of land, (*ch'ah kiai wei yeh*), which have remained theirs until this day, and have of course increased in value.

The great Sz Ch'uan rebellion of the seventeenth century was started by an ambitious blacksmith named Li Tsz-ch'êng, whose skill in manufacturing arms had gradually brought him to a position of affluence and influence. He and Chang both hailed from the borders of Shen Si, and, joined by a dozen or more of kindred spirits, proceeded to attack the Ming rule. Li made for Peking, Wang San-hwai took the east of Sz Ch'uan, and Chang attacked the west. Chang's ferocity was unprecedented, even in the annals of China. He almost entirely depopulated the Province, in such wise that the present inhabitants, with the exception of those on the south-east frontier, (who are the old stock, or *lao pén*), are nearly all immigrants or the descendants of immigrants from Hu Kwang and Kiang Si. The reason for his furious savagery is stated by popular tradition to have been twofold, and there is something so droll about it that it is difficult not to attach some credit to the story. It appears that Chang Hien-tsung had been invariably overreached in his mercantile transactions with the wily Sz Ch'uanese of those times, who in huckster's cunning were not inferior to their descendants of this day. At last he was cheated at a gambling house of every copper cash he had in the world by an assembly of local filchers, in such wise that he sold everything he had, even to the last rag on his back, in order to pay his score.

lodging destitute in a temple, he rose at night to obtain that temporary relief which nature denies not to her least favoured subjects, and, grasping at what he thought was a bundle of straw, applied it for some reason to his person. It turned out to be nettles, but the mistake was not discovered until the luckless Chang was covered,—not from head to foot, but midway,—with hideous stinging pains. With a rude oath he exclaimed: 'Why, the very plants of this cursed province are in league against me,' and swore to destroy every organic thing in it—a vow which, as history shews, he as nearly as possible put into complete execution.*

Descending from the coal-mines to the village of Kau Tien-tsz on the high road to Pi-shan, the traveller branches off to the east, and by a steep stone road about six feet wide, resembling, as is often the case in Sz Ch'uan, a flight of steps, arrives at Ts'z-ch'i K'ou, a flourishing village of perhaps 6,000 inhabitants, and consisting of two distinct parts, separated by the bed of a summer torrent, which is crossed by a very substantial stone bridge. The country between Ch'ung-k'ing (after passing mile after mile of graves) and Ts'z-ch'i K'ou is a perpetual succession of ups and downs, like vast truncated pyramids covered with vegetation. When one leaves the high road, it becomes exceedingly difficult to cross the country, for the only paths take circuitous courses amongst the paddy fields. At this time of the year, (winter), the chief crops are wheat, sugar-cane, the poppy, carrots, turnips, rape; and, above all, beans and peas. Beans cover the land from the summits of the hills down to the very sand at the water's edge. Broad beans, horse beans, and peas are the chief varieties of pulse. There are two sorts of sugar-cane, (*Kan cha*), grown in Sz Ch'uan. The red variety requires more manure and more attention than the white, and, being soft, is chiefly used for eating in its raw state. Four sorts of sugar are made from the white variety. First, the common red or yellow sugar, i.e. unrefined or 'brown' sugar, which is in commonest use, and sells at 56 to 58 cash the catty: this kind is considered to be 'heat-giving.' Second, the white

* I have since read the account given by a European Jesuit who was with him, and find that the so called depopulation could not possibly have been anything like complete.

sugar, which is simply the brown sugar freed of its impurities, which are sold at 30 odd cash the catty under the name of *Lou-tsz T'ang* or 'leakings.' The white sugar is considered to be cooling as a comestible, and varies in price from 85 to 100 cash, according to its purity. *Ping-t'ang*, or 'ice-sugar,' i.e. sugar-candy, or crystallized sugar, is again made from white sugar, and sells at 120 cash the catty, or Tls. 80 the 1,000 catties. It is chiefly used in entertaining guests, making sweetmeats, and so on. Refined sugar is obtained by placing the brown sugar in vats, floored with grass, and covered with potash obtained from the same kind of grass. The vats are exposed to the sun and dews for about a month, when the potash no doubt exercises the same effect as the lime-water and charcoal in English refineries. The *Lou-tsz* runs out from a plug in the bottom of the vat, whilst the remainder, as yet but imperfectly whitened, is further refined by exposing it on large mats to the sun and night air.

There is no sugar guild or mart at Ch'ung-k'ing, the merchants having, in recent years, removed to Wan Hien on account of certain difficulties thrown into their way here, and of a local habit in vogue amongst the coolies of pilfering the sugar. Most of the up-country sugar comes from Sui Fu and the Nui-kiang District. The sugar is expressed from the cane by two oak (*Ch'ing-kang*) rollers, (*Kun*), in which are set cogs, (*Ch'ih*), between which the cane is held by a feeding coolie as the rollers are turned by cattle. The juice runs along a small bamboo gutter in the area to a series of vats, whence it is scooped into the boiling pans. Emerging thence, it has more the appearance of cheap 'toffy' than anything else. I saw one of these factories near Ch'ang-shou District city; but there the rollers were made of stone. About twenty men were employed in this factory, and their wages, besides food, were 60 cash a day. The owner told me that the price of the coarse sugar, as it stood there, was 3,000 cash a pecul, and that 1,000 cash worth (10 bundles) of cane would produce one pecul.

Ts'z-ch'i K'ou is about 40 *li* by water from Ch'ung-k'ing, and 35 by land. The road avoids the turns of the river, which it first sights at a half-way eminence called Fu-t'u Kwan, a small town under the direction of a petty military official, where the Pi-shan road branches off from that which leads to the provincial capital.

There are two rather remarkable temples at Ts'z-ch'i K'ou, the one for its two very correct, artistic and picturesque, dragons of plaster winding round two pillars in the great hall, and the other for its commanding site on the side of a precipitous rock, the *fêng-shui* or 'luck' of which must, from a Chinese point of view, be very auspicious. In the one was posted an official proclamation by the *Sêng-kuei*, or Buddhist Superior for the District of Pa Hien. Between the Man-tsz Caves and Ts'z-ch'i K'ou, there are two very formidable groups of rocks in mid-stream which cause dangerous rapids when the water is high, but which at this season are easily avoided. The lower ground at a place called Tsung-tu K'ou, is known as the Shih Mên, or 'Stone Gate;' and there is some legend about their having once been connected in a natural bridge.

The river takes a decided bend to the north after leaving Ts'z-ch'i K'ou, and rounds a bed of shingle called Sha-p'ing Chi, above which are two small rapids, and some very ugly rocks running down into mid-stream like a wedge from the banks, forcing the trackers to go round and back again. The river in the winter only occupies a quarter or a fifth of its summer bed; but in some places it divides into two channels, with awkward banks of shingle in the middle. The water is beautifully clear, and the bottom can easily be seen. I saw no fishing in this river, and no fish, but omitted to ask for any explanation of this phenomenon. The fact that the bottom is nearly everywhere shingly would probably account for it, for the most energetic fish could hardly suck nutriment from a stone.

Shortly before coming to the market town of Chin K'ou, the river makes a bend to the north-west, round what looks like a fortified hill on the right bank. Sz Ch'uan appears to be covered with these defences, which have almost the appearance of small cities, and remind one very much of Saxon Switzerland, as the Elbe district above Dresden is called. Probably the reason why they are not found in the coast, northern, and central provinces is that the country is not adapted for their construction;* but I understand they are common enough in Kwang Si.

Chin K'ou is a small coal-producing town on the right bank,

* I have since read that they were mostly constructed during the great sectarian rebellion of 1796—1803.

thirty *li* from Ts'z-ch'i K'ou, and at this point the river takes a tremendous bend eastwards, which continues through various tortuosities as far as Yüeh-lai Ch'ang. My only scientific instruments on this short journey were a walking stick and a four-dollar brass watch; but as the sun only appeared once or twice, the stick made a poor dial, whilst only the minute finger of the watch went round, and that on condition of the watch being wound up twice a day, so that it may be concluded that my topographical observations are open to correction. On one occasion I requested my servants to hold a consultation with the boatmen and villagers as to which direction was due east. Being unable to decide within 180 degrees, the services of two village boys were called into requisition, one of whom swore that he had seen the sun rise in winter over one tree, and in summer over the other. The other boy said there was an east wind blowing now, and that he understood the east to be that place from which the sun did come. The above are my reasons therefore for saying that the Kia-ling Kiang makes a general north-westerly course from Ch'ung-k'ing to Ho Chou, or, rather, a south-easterly course the other way about. But from Ch'ung-k'ing to Yüeh-lai its course is, first north-west, and then north-east, describing a semicircle round the direct road from Kiang-Pêh to Yüeh-lai. The half-way village between those places is Yüan-yang K'iao. A few miles above Chin K'ou there is a very awkward rapid called Hê-yang Shih, where the main channel runs, not only across the river's bed, but a little backwards to boot. On the down side of the current is a sloping shingly bank, covered with a few inches of rapid water. On the up side of the current is a similar bank, a foot or two higher than the lower one. The extraordinary spectacle is presented of junks mooring in mid stream in the slack water below the upper bank, with their stems and sterns across the river, and of other junks being towed with infinite pains across the river only a few yards from where the anchored junks are peacefully lying. Descending junks come tearing down between these two, and look as if they would annihilate every obstacle. It was interesting to watch one of the anchored junks set herself loose; but she made a bungle of it. Only a few inches of pushing were required to plunge her into the foaming current;

but, for some unexplained reason, she swept round with her head up-stream. Everybody on board got mixed up with the tackle and bow sweep, which took quite independent action, and completely cleared the decks. The junk then gave another turn round, her long sweep catching the cabin of an upward junk fair and square, and crashing both itself and the gingerbread gear of the other craft into splinters. The hands on both junks were levelled like ninepins by the respective ends of the errant bow-sweep. As a rule, Chinamen will almost yell their lungs out for a matter of a few cash; but on this occasion the disaster was so sudden and startling that nobody spoke; moreover, it would be ill-speaking from a prone position in the cockpit with an irate bow-sweep flourishing itself in wanton independence above.

About five *li* above Hó-yang Shih is T'ung-chia Chi; and, five *li* above this again, Ki-kwan T'an, also on the right bank, and evidently a thriving coal station. The people said that most of their large coal went up stream to the salt factories of T'ung-ch'wan, and that the slack only went down to Ch'ung-k'ing; and this I can well believe, as I did not notice any coal coming down stream at all.

I took a walk across the bluffs enclosed in the bend between Chin K'ou and Ki-kwan T'an, and had some conversation with the peasants. They said that their lands were usually held on lease, terminable at the tenant's will only. The landlord receives from seven-tenths to one-half of the autumn rice-crop, according to the amount of *Ya tien*, or 'deposit,' placed with him by the tenant. The Chinese acre, or *mou*,* is absolutely unknown to the peasantry of this part of Sz Ch'uan: the land goes by the 'piece,' a word as vague here as with us, but qualified by adding how many *tan* of rice it produces. A *tan* is in this case 400 catties, and unhusked rice, or *ku-tsz*, is half the value of husked rice, or *mi*. The landlord invariably pays the land-tax, which in Sz Ch'uan is nominally light, but is enhanced tenfold by the addition of innumerable fees and extras. Moreover, land may be sold free of land-tax or encumbered with land-tax so that the measure of land is not the slightest criterion of what tax is due upon it. This is the case in many other parts of China too.

* One-sixth of an English acre.

The river turns once more to the north at a rapid called Li-chia T'an, where a number of coolies are in readiness to lend a hand to upward junks. A notice is written in huge white characters on a boulder to the effect that 28 cash (one penny farthing) is the fixed rate for each man. For this sum, which is more than double the usual rate, the coolie does half-an-hour's hard work, and, besides, follows the boat for a mile or two to chaffer about his remuneration. In this case our skipper held out successfully for 24 cash.

After rounding Li-chia T'an, you lose sight entirely of the range of mountains which runs in a north-westerly direction from Ch'ung-k'ing to Pi-shan, and of which the most prominent peak is Ko-lo Shan, apparently about 2,000 feet above the river level. A little higher up, a notice daubed in whitewash upon the rocks informs the traveller that, in the 10th year of T'ung-chih, (1871), the water rose to that point, which appeared to me to be about 60 feet above its winter level; but some of the peasants informed me that in the *kêng wu* year, (1871), the water had risen 100 feet. All the way up the river I heard of the terrible flood of *kêng wu* year; but I could not find a single person who could name the year of the Emperor's reign, or calculate how many years back it was,—at least without spending some time in the operation. In that year, the city of Ho Chou, the highest roofs of which certainly stand now 100 feet above the water, was completely swamped, and the inhabitants had to encamp on the neighbouring hills. The water even entered one of the gates of Ch'ung-k'ing, and the position of Ch'ung-k'ing resembles that of Ehrenbreitstein on the Rhine more than anything else I can think of.

Yüeh-lai Ch'ang is a market-town on the left bank of the Little River, and is, I was informed, a considerable grain market. Grain of all kinds was stated to be cheap and plentiful in those parts. A small rapid called Ta-kwa Shih has to be passed before arrival at Yüeh-lai. The boatmen took the opportunity here of laying in a store of rice. Six hundred *tan*, or 240,000 catties of rice, and one hundred and fifty *tan* of pulse and other grains are required for the daily consumption of Ch'ung-k'ing. Part of this is doubtless required for spirit-distilling, paste, and other manufacturing purposes: but it enables one to make a fair estimate of

what the population must amount to, as is shewn above. The average daily consumption of all ages and both sexes in meals alone is four *ko*, or $\frac{1}{10}$ of a *shêng per capita*. The number of boatmen who purchase stores here, and of villagers who take a meal in the city on their way to and fro with their commodities must also be taken into account. Sz Ch'uan has always produced more rice than it can consume; and, in years when the surplus produce is not required by other provinces, it is stored in its preservable or unhusked state (*ku-tsz*) in the granaries, the contents of each bag being aired once a year. In this way it may be safely laid by for ten or a dozen years. During the year 1880, rice was exceptionally cheap at Ch'ung-k'ing, the prices being 720, 690, 650, and 640 cash the *tou* of 40 catties. A strong man could thus easily keep himself in food for one penny a day. The different kinds, beginning with the best, are *shang shou*, *nan shou*, *ts'ao shou*, and *ch'i tsz*, all of course from Sz Ch'uan.

A little above P'u-t'o, on the left bank, the first of three successive gorges is entered, known as the Kwan Hia. On the other side, a mile or so above P'u-t'o, is a village called Ch'ên-chia Liang, which boasts a very tolerable pagoda. The banks of the river, which had been growing more and more sandy as one advanced from Ts'z-ch'i K'ou, now narrowed in and became barren and precipitous. There seemed to be a great deal of coal and lime in the vicinity, as each village was engaged in the trade. I noticed some rather weird-looking caves in this gorge, but nothing else very remarkable. The hills on either side are apparently not more than 700 or 800 feet in height, and the pass bears some resemblance to Blakiston's 'Iron Gorge,' a few miles below Ch'ung-k'ing. A slight bend to the north-east at the upper end of the Kwan Hia brings into view Hwang-kwo Shu, a long and straggling market-town on the left bank, consisting of two *kai*, or separate portions, at either end of a perfectly flat embankment. In the year 1871, the waters overflowed this embankment, and flooded the lower levels on the other side. As you emerge from the Kwan Hia, a spur of barren hills about 1,000 feet high runs to the south-east, and forms, with the low hills on which the town is built, a sort of triangular basin, of which the apparently artificial dyke connecting the two ends of Hwang-kwo Shu is the base. Here again I noticed

a great deal of coal, and here also I was told that it was nearly all sent up the river, from which I conclude that there is no coal in the north part of the Province. Beans were here grown in great profusion, from the tops of the hills, right across the shore, and on patches of sandy soil in the rocks, down to the water's edge. I only saw very occasional patches of opium, though around Ts'ze-ch'i K'ou I had noticed it planted in great quantities. Opposite Hwang-kwo Shu is the village of Pê-pei, above which the rocks jut out far into the river bed, and form a very dangerous obstacle for junks to round. They are locally known as Pê-shih Liang, and just above them is a dangerous rapid in a bend called Kou-chia Wan. A few days later, in descending the river, our boat nearly came to grief here; and already since our first visit one large junk had been wrecked. Her cargo of rape-cake and *t'ung*-cake was being dried on the rocks. Several other junks were wrecked during our passage up and down: but the Chinese seem quite prepared for such occurrences, and simply rig themselves up a mat shelter on the bank, and encamp there until their cargo has been salved, and their boat leisurely repaired. We now entered the second gorge. The course of the river is here almost due north and south, and the hills on each side are apparently about 700 feet high. This gorge was, until a few years ago, a perfect nest of salt runners, who defied the authorities, and swamped the surrounding country with uncertificated salt from Shê-hung. There appears to be a great deal of mineral wealth in these rocks, for coal-mines and lime-kilns were dotted over each bank of the river. I noticed here a very ingenious contrivance for ventilating the coal mines. Near the mouth of the mine, a wheel is turned by water, conducted from the top of the hill in bamboo tubes: this wheel turns on the same axis as a second wheel, which revolves in a covered-up case having a hole in its side round the axle. The circumference of this latter wheel is supplied with a number of exaggerated cogs or fans, which pump out the foul air from a horizontal shaft or conductor carried into the mouth of the pit. I was informed that the coal-diggers worked with an ordinary oil-lamp made fast round their foreheads; but, as I did not care about crawling down one of the mines, and found no one intelligent enough to explain upon what principle these lamps were made, I failed to ascertain if any

precaution was taken against fire-damp. About half way through the gorge is a temple called Wên-ch'üan Sz, through which runs a stream of tepid mineral water, and in which are constructed baths for the use of invalids. This water runs down a steep incline into the river, and, from its warm and smoking appearances, gives its name to the gorge, namely Wên-t'ang Hia. I requested the priest to conduct me to the source of the warm stream, which was about 200 feet above the river; but nothing could be seen except a dry hole, through which he said the water occasionally bubbled up. It escaped, when I saw it, from an invisible underground spring below this hole. The natives called the water *siao-shui* or 'saltpetre-water,' and said that it came from a great distance. I brought a bottle of it back with me to Ch'ung-k'ing, and begged a member of the French Mission to test it for me. This he was obliging enough to do, and his verdict was as follows: 'Elle contient principalement du sulfate de chaux, et n'est pas médicinale; c'est ce qu'on appelle eau séléniteuse.'

Next door to the temple was a large lime and paper factory. Among the manufactures of Sz Ch'uan, that of bamboo paper is decidedly one of the most interesting. Young bamboos are first split into shreds, and are then placed in layers in a large pit, with a quantity of unslaked lime or lime-stone, (*hui kwang*), between each layer. Water is then poured upon the mass, and it is left to seethe there for several months. The rotten bamboo is then taken out, and cleansed of the lime particles, after which it is placed in a bottomless barrel or steamer, standing upon an iron pan. A fire is lit below the steamer, (*kwang t'ung*), and the mass is well boiled. It is next ground in a stone mill, (*nien*), and raked out, being then deposited in a stone trough full of water, over which the workers stand. A beautifully fine curtain-like bamboo frame, about three feet broad by 18 inches long, as fine as a tooth-comb, is then dipped into the mashy mixture, and taken out with a thin film deposit upon its surface. This frame is gently placed upon a heap of similar deposit, (which in large quantities looks like a pile of melted ginger-bread), and carefully lifted, leaving the deposit behind. When the heap has dried, it is deftly torn into sheets of coarse paper. The coarsest kind is called *chih ching*, or 'paper essence.' *Ts'ao chih* and *shui chih*, i.e. 'grass' and 'water

paper' are other names. The bamboo frames are very expensive, costing, the workmen said, over 1000 cash apiece. They were paid at the rate of 18 cash the 360 sheets for the mere labour of taking the mash out of the trough, and stated that they could each of them earn 500 cash a day, and that two sheets of paper sold for one cash. At Ch'ung-k'ing, however, the price is 300 cash a *k'un* (or ream) of 50 *ko* (or quires) of 30 single sheets. This would be at the rate of five sheets for one cash; but no doubt the qualities differ.

We met a large fleet of official salt junks coming down this gorge; and some frightful altercations went on between our crew, who were whistling for a breeze, and the crews of the salt-junks, who in some way or other, not perfectly clear to me, by counter demonstrations encouraged the unwilling Boreas and Eurus to keep away. Some of these salt junks, I was told, carried as much as 130,000 catties of salt, or about 85 tons. The salt wells of Shê-hung and the neighbouring towns produce over 5000 loads, (*tsai*), or, say, 225,000 tons of salt a year, and supply the northern part of the province, as well as a portion of Shen Si. The salt wells at Tsz-liu-ching in Fu-shun produce over 8000 loads, and those at Wu-t'ung Ch'iao in K'ien-wei about 4000 loads. These three factories are under strict government supervision, and bring an enormous revenue to the Sz Ch'uan treasury, as well as to the Hu-pêh government.* The west of Sz Ch'uan is supplied to a certain extent from the wells of Nui-chiang and Kien-chou, whilst a certain quantity of Yang-pêh (Yün Nan) salt is consumed in the Lolo country of Kien-ch'ang, (West Sz Ch'uan). The prefectures of Chau-t'ung and Tung-ch'uan of Yün Nan, however, import Sz Ch'uan salt, and the province of Kwei Chou depends almost entirely upon Sz Ch'uan. In the extreme south-east, a considerable irregular salt industry is conducted at Yü-shan Chên, which exports also to Hu Nan. K'wei-chou Fu produces about 80 loads a year during the four winter months, when the beds are exposed; and Ta-ning, Yün-yang, and K'ai Hien produce about 500 loads between them. Until the year 1878 Hu Peh is said to have imported from Sz Ch'uan nearly 10,000 loads a year, on which was collected at

* See a fuller description of these wells in a succeeding chapter.

Ch'ung-k'ing alone a sum of between Tls. 300,000 and Tls. 400,000 *likin* duty, and at K'wei Kwan nearly double as much. The re-organization of the Hwai salt trade is now driving the Sz Ch'uan salt out of Hu Kwang, and the Yang-chow salt traders have offered Tls. 1,600,000 a year for the monopoly of the Three Kiang and Two Hu Provinces. It is not too much to say that the *selling value* of Sz Ch'uan salt at home and abroad reaches Tls. 60,000,000 a year, on which the Sz Ch'uan Government raises at least Tls. 3,000,000 in taxes. The Hu Peh Government, it is said, also levies a tax of 18 cash a catty at P'ing-shan Pa above I-ch'ang, which produces over Tls. 2,000,000 a year.*

Opposite the villages of Erh-ngai, on the left bank, the river makes a bend, first to the north-west, and then to the north-east. At the apex of the bend is a hamlet called Sha-ch'i K'ou, where a gunboat is stationed, and downward salt junks are overhauled.

A mile beyond Sha-ch'i K'ou, on the same bank, is a considerable market-town called Mu-t'ou Ch'i.

The country opens out for a few miles between the Wen-t'ang Hia and the Niu-p'i or Niu K'ung Hia, a name given to the third gorge on account of a peculiar double cave found on the right bank, near its upper end, which cave bears a remarkable resemblance to a cow's nostrils. There are two small rapids in the reach between Sha-ch'i K'ou and Ch'ao Kai-tsz, a market-town on the left bank where the river again turns north. Its general course between the two gorges appears to be north-east, that is, looking up the river; or south-west, in the direction of the current. A mile or two above Ch'ao Kai-tsz, on the opposite bank, is the village of T'an-pao 'Rh, and, opposite, a pretty large *ch'ang*, or market-town, called Ma-li T'ing, at both of which places coal was being worked quite close to the river. Half a mile further on is Mo-tsz T'ou, on the right bank, where mill-stones were being hewn in large numbers. Just below Ma-li T'ing there is a small rapid called Ch'iu-mên 'Rh, in a bend locally known as Fang-chia T'o. Some peasants to whom I spoke said that, in addition to their land-tax, they had to pay various minor levies, such as tea-tax, salt-tax, office-charges, transport, aids to salaries, and so on, which

* Since writing this, I have given elsewhere a more complete account of the Chinese salt industries.

amounted in all to fourteen times the regular land-tax. In some districts, where the people have prescribed or enforced their right to freedom of trade in salt, the salt-tax is levied annually with the land-tax. Ho Chou and Pi-shan are examples of these, which are called *kwei ting* districts. In the others the monopolists pay the salt-tax, and of course retail the salt at a higher rate. The great difficulty with the Government, therefore, is to confine salt distribution to respective areas. Twenty miles is often sufficient to add 25 per cent. to the selling price of salt. One old man told me that the regular land-tax for Ho Chou was Tls. 17,000 a-year; for Sui-ning, higher up, Tls. 27,000 a-year; and for Kiang-pêh Tls. 3,000 a-year. As there are 154 districts in Sz Ch'uan, and the regular land-tax is about Tls. 600,000 a-year, this would give an average of Tls. 4,000.

Along the banks here I noticed a number of white target-like daubs on the rocks, and, on enquiring for an explanation, was informed that these were intended to frighten the rabbits away. Tame rabbits appear to be household pets in Sz Ch'uan, for in several villages I have seen them running about the houses. The dogs of the country are a great nuisance. Possibly their ferocity is owing to the local custom of dwelling in detached houses rather than in villages. The calves of my legs would have long ago presented a sorry and ragged spectacle if I had not been provided with a powerful stick which, under its polished and silver exterior, concealed a considerable weight of iron. The popular Chinese notion that foreigners must have eyes in the back of their heads must in many cases have been confirmed on the return of a wounded dog who had unsuccessfully attempted to appropriate part of my pantaloons. My practice was to disregard all excessive canine zeal until the animal became sufficiently emboldened to risk positive contact, and my efforts were then directed to suddenly whisking round the stick whilst keeping an eye deceivingly fixed on some object ahead. Failure to hit thus losts its ignominy, whilst repeated unsuccessful efforts were occasionally gloriously rewarded by the approving looks of the bystanders.

Opposite the village of Sz-tsz K'ou, or Miao-tsz Cha, at the upper end of the third gorge, is a very remarkable work of art called a *Siao Mito*, or 'young Buddha,' sculptured in the rock

on the right bank, about 60 feet above the winter level. This is a youthful figure, about double life-size, of a child Buddha kicking up his heels in Manx fashion. The colours are very gay, and the expression of the face very lifelike: in fact, the whole forms one of the best specimens of the sculptor's art that I have ever seen in China. A short distance above this you emerge from the gorge at a village called Yen-ching Ch'i, also on the right bank, where lime is worked in great quantities. At this time of the year the current is very slack in all these gorges; and, whilst tracking is impossible, owing to the steepness of the rocks, upward and downward junks progress at about the same rate, by means of oars worked by men standing in the bows.

Chü-niang T'o and Yin Wo-tsz are the names of two bends which bring you to Sha-ch'i Miao, where the river makes a most decided bend east and north, coming round west again as far as Tung-ching T'o, whence it turns once more north in a straight reach leading to Ho Chou. The distance from Sha-ch'i Miao across to Tung-ching T'o is only 20 *li*, but by water quite double that distance. The reach eastwards from Sha-ch'i Miao terminates at a bend called Hwang-chia Wan, where there is a most horrible combination of rapids, shallows, and rocks. A huge rock, like a lion couchant, lies in mid stream just at the bend, standing at this period of the year forty feet out of the water. On the inner side, about two feet of water run with great rapidity over a shingly bank a quarter of a mile broad from the shore. The main current runs outside the rock, and against this all but the smallest junks must be towed; but as the rock begins where the banks turn, the trackers can only pull at right angles to the direction of the upward junk, whilst the rock is too high to permit of the line being passed over it. Our line broke here, and we had to lose an hour in crossing to the other side, where the rapid is swifter and more obstructed, but on the whole easier for a small junk. This rock is called Chao Ch'in, and is said to be the *fêng-shui*, or 'luck-director,' of Peking, but in what manner I failed to elicit. In the year *kêng wu* it was entirely covered, for the first time within the memory of the oldest inhabitant. Several large flocks of white egrets (*pé ho*) flew by here, and we met others both above and below this point; but as they sped

their way in different if not diametrically opposite directions, I was unable to conjecture whether they were impelled by any higher motives than the prospect of a marsh full of frogs. By the way, with the exception of these egrets, a couple of quails, and a few wild ducks, together with the ubiquitous dogs and the places where rabbits were requested not to come, I saw neither vermin, fish, flesh, fowl, nor insect of any kind on or near to the Little River,—not even a magpie, a frog, or a cow. On one occasion, certainly, I noticed a boatman make a sudden dive at his companion's gaberdine and possess himself of a parasitic creature called a *shih-tsz*. They were considerably amused when I inquired if he intended to *pai* the owner of the coat as his *lao-shih*,—a would-be witticism which speakers of Chinese will easily comprehend.*

The reach which runs northward from Hwang-chia Wan terminates beneath a very picturesque *chai*, or fortress, called Tiao-yü Ch'êng. In talking of these defences, I discovered that one of the boatmen had been taken prisoner twenty years ago by the rebel Shih Ta-k'ai, who had chopped off his *queue*, and kept him in durance for three years. As it was known to the Government that many of this band were unwilling rebels, he obtained quarter, together with other deserters, when the leaders of the band were surrounded.

At Tung-ching T'o there is a very fine nine-storied pagoda nestling amongst the cypress and fir trees, which goes by the name of Pê-t'a P'i. Opposite to this, is a *likin* station where dues are collected in the interests of Ho Chou. Two miles further up on the same side,—the right bank,—there is a still more striking pagoda of eleven storeys. You are now in sight of Ho Chou, a town built, like Ch'ung-k'ing, on a wedge of land between two rivers, the one of which goes north-west, and is navigable as far as T'ung-ch'uan, (twenty days up and six down); and the other of which takes at Ho Chou an easterly, and afterwards a northerly course to Shun-k'ing and Pao-ning.

Ho Chou was almost destroyed by the great flood of 1871. To look at the town as it stands, with the two rivers at their winter's level, it seems hardly conceivable that it could ever be flooded. I

* *Lao-shih*, 'a patron,' sounds, moreover, remarkably like the English word for the unmentionable parasite.

took a walk through the city, which appears to be a very thriving place, and which is perhaps a trifle cleaner than Ch'ung-k'ing. The Ch'êng-hwang Miao, Temple of Confucius, Guild-halls, &c., are substantial and well-kept edifices, and things generally were in a very tolerable state of repair. Ho Chou is of course a great trading centre. *T'ung* oil, and cake; rape-cake, cotton, wine, &c., go up north from Ch'ung-k'ing; and coal and lime from the gorges. Drugs of all descriptions, and salt come down the rivers, besides a quantity of timber. Ho Chou seems to be quite a ship-building place; more so, in fact, than any I have yet come across on the Yang-tsz. No junks are built at Ch'ung-k'ing. The woods chiefly used are *pê-mu*, or 'cypress,' and *ch'ing-kang*, a species of *Quercus*, employed chiefly for the bottom planks. Though wood is remarkably cheap and plentiful in eastern Sz Ch'uan, coal appears to be the universal fuel, brushwood and *ch'ing-kang* being used only to ignite the fires.

Between K'wai-chou Fu and Ch'ung-k'ing I passed many places on the river where timber was exposed for sale at exceedingly low prices, thin planks, for instance, for 10 cash the *chang*, or one half penny the fathom. At Ch'ung-k'ing timber for building is sold in pieces fourteen Chinese feet long. When six inches broad by two thick, the planks are called *t'iao pan;* when seven inches broad by 1½ thick, they are called *lou pan*. The *chwang pan* are the *t'iao pan* sawn into three thicknesses of about ⅓ of an inch, and the *fên pan* the same sawn into four half-inch thicknesses. The price varies according to whether the wood is *sz li* (? *Quercus cornea*, Lour.) or *sha mu* (? *Cunninghamia lanceolata*); planks of the former ranging from three mace and over, and the latter two mace and over apiece. The extra cost of sawing the planks into thinner pieces is fixed at 18 cash the 'thread' (*sien*), or thickness. The timber of the *sung* tree (? *Pinus sinensis*, Lamb.) is not considered desirable, on account of the readiness with which it warps or shrinks. The *ko* (or *chio*) *pan*, and *ko* (or *chio*) *tsz*,—the latter being the same length and thickness but half the breadth of the former,—are always made of *sha mu*, and cost, now, respectively, a trifle over a mace or over five candareens the piece. The length of the *ko-pan* is 14 feet, by five broad, and nearly two thick: they are chiefly used as rafters. Larger pieces

of timber called *lo-yen*, from 18 to 24 feet in length, by 8 or 9 feet in breadth, and 2 to 3 in thickness, have no fixed price, but vary from Tls. 5 to Tls. 10 the piece. Pillars of timber are sold according to diameter (*kwo-sin*), and the price differs accordingly as they are prepared or in the rough. Up to one foot in diameter, pillars of forty feet in length are cheap, not costing more than Tls. 2.5. Twenty or thirty taels would not purchase the same length with a diameter of a foot and a half, and still thicker pieces have only fancy prices.

After inspecting the city of Ho Chou, I determined to ascend the Shun-k'ing river about seven miles further, to its junction with the K'ü Ho, the river which runs down from Kwang-an and K'ü Hien in the north-east. For the first two or three miles navigation is intricate, on account of the numerous rocks lying about. On the right bank, beginning at about four miles from Ho Chou, are innumerable Man-tsz Tung, or savages' caves, scooped out of the rocks, all on the same model as those already described. The only information any one could give was that they dated from a 'former dynasty.' Some of them were utilised as lofts of store-houses, but none as dwellings, even for the pigs, though they had a more wholesome, not to say snug, appearance than many of the houses. Blakiston and other travellers have already noticed the Cheshire-farm-like exterior of the Sz Ch'uan homesteads, whitewashed with lime, and having black wooden supports between portions of the walls. I found the people everywhere quiet and indifferent; but suspicious, timid, and intensely stupid. Though more civil, or rather less aggressive, than the people between Kewkiang and Hankow, they are not as manly; and though quieter than the people around Chinkiang and Shanghai, they are not as simple and honest. The dialect spoken everywhere was the same,—an improved variety of the Hankow dialect, the tones being absolutely similar. All those whom I questioned were immigrants or the descendants of immigrants: the old stocks seem to have been rooted entirely out of this region; but on this point my enquiries have not yet had time to lead to ripe results.*

The junction of the K'ü Ho with the Shun-k'ing River

* The sectarian rebellion half depopulated this region again.

is in no way remarkable. There is no town or considerable village within sight. Everything looks calm and peaceful around, as though one part of the river had said to the other:—'Let us go our ways in peace.' Accordingly, one part goes south and the other north, the two forming a T with the Ho Chou branch. The weather was so fine and mild that I had serious thoughts of going on to K'ü Hien; but this my second experience of boat travelling in Sz Ch'uan proved to me that the best policy was to go up country by land, and come down by water. Only those who have laboriously toiled up rapids, and round bends and rocks, can appreciate the excitement of coming tumbling down again. The stupid peasants who so provokingly squatted idly on their haunches when they might so easily have lent a hand, now transform themselves into most picturesque creatures as they disappear rapidly behind corners. You regard almost regretfully a boulder whose grizzly features you formerly had such over-abundant leisure to contemplate. You regard with comfortable sympathy the junks which you meet labouring up the rapids as you whisk by. The fresh yet mild air seems to percolate through and through you, and produces a roaring appetite for the savory mess which is cooking in the grimy galley. Such, at least, were my reflections as, after two days' downward journey, I once more sighted Ch'ung-k'ing.

The winter climate of this region is peculiar. The temperature between December and February ranges steadily between 45 and 55 Fahrenheit night and day, seldom varying more than 5 degrees in 24 hours, unless the sun appears, which rarely takes place oftener than on the average twice a week; and that for only a portion of the day. Perfectly clear days are very few and far between; whilst fogs and mists are the rule. The people, rich and poor, complain very much of coughs, which I presume are caused by the humidity. During the first two months I was there, the air was never keen; nor was it ever keen after once passing the I-ch'ang Gorge.

I may now say a word about Ch'ung-k'ing. There were histories of Ch'ung-k'ing (called also Pa and Yü) compiled under the Tsin and Sung Dynasties; but their names only now survive. During the Ming Dynasty, there were histories of both the

Ch'ung-k'ing Prefecture and the Pa District; but these also disappeared with almost everything else the Province possessed after the Vandal scourge of Chang Hien-tsung had swept over Sz Ch'uan; and the annals of the town, at present existing, date from the year 1760, having been recently re-edited by the *taotai* Sip'ei and his colleagues.

Ch'ung-k'ing is built on and entirely occupies an isthmus or spit of land between the Kia-ling Kiang and the Min Kiang. These are the names used in the modern annals; but the local appellations are Siao Ho and Ta Ho; or Ho Chou River, (from the town of Ho Chou), and the Yang-tsz. During the Ming Dynasty, the area within the walls was divided into eight *fang* or wards, and the extra-mural portion into two *siang* or suburbs. In the year 1708, the city portion was re-divided into 29 wards, and the outer town into 15 suburbs, with six further suburbs for the town on the left bank of the Kia-ling, known as Kiang-pêh T'ing. The Sung Dynasty divided the country portion into four *chên*, or market-towns; the Ming Dynasty into 72 *li* or villages. At the beginning of the Ch'ing, or present Manchu Dynasty, the division was into four *li*; but in the year 1760 this number was changed to twelve, each *li* being sub-divided into ten *chia*, or hamlets.

The Prefecture of Ch'ung-k'ing must not be confounded with the District of Pa, the one walled town commonly known as Ch'ung-k'ing being the Prefectural and District Capital respectively of both territorial divisions, the latter of which is contained in the former. Nor, again, must the sub-prefecture of Kiang-pêh, subordinate to the Prefecture of Ch'ung-k'ing, be confused with the District of Pa, from which it has in recent times (1761) been carved. The Pa Hien or District is bounded on the East by that of Ch'ang-shou, the frontier of which is 200 *li* distant; on the South-east by that of Nan-ch'uan, 180 *li*; on the South by K'i-kiang, 100 *li*; South-west, Kiang-tsing, 100 *li*; West, Pi-shan, 80 *li*; North-west, T'ung-liang, 140 *li*, and Ho Chou, 100 *li*. The area of the District would thus be, roughly speaking, 40,000 *li* or 3,600 square miles. Two and a half (those on the north bank of the Kia-ling) of its hamlets have since been transferred to the Kiang-pêh Sub-prefect, and eight hamlets of one of its western

villages to the Magistrate of Pi-shan. The right bank of the second Gorge is partly under Pi-shan.

The Prefecture and District had many and various names and territorial divisions and amalgamations during the earlier Dynasties; but Hung-wu, founder of the Ming Dynasty, built the city in its present form, with 17 gates; nine made to open, and eight permanently closed. The rebel Chang Hien-chung took possession of the city during the reign of Ch'ung-chêng, the last Emperor of the Ming Dynasty, having effected an entrance by the Western or T'ung-yüan Gate, the only one which opens freely on the plain. The Viceroy K'ai ordered the thorough repair of the city walls in the year 1761. Every inch of ground within the walls is closely built upon; and the walls themselves, which look massive and lofty from the outside, resemble from the inside more those of Chester or Arles than the broad ramparts of an ordinary Chinese town. The rock on which the town is built is sufficient protection, the outer surface of the walls only serving to render sheer the rough face of the hill.

The number of registered land owners in the District was 2110 at the commencement of the present Dynasty. It is now fixed at 13,638, the number in 1759, (although 898 additional owners have appeared in the meantime), paying a land-tax of Tls. 10,733, with a proportionate addition for intercalary months. This amount is never to be exceeded, having, with the land-tax all over China, been made perpetual from that date. The Emperor Kien-lung thus anticipated King George the Third by 38 years.*

* Since writing this, I have treated of the land-tax of China in a special paper.

THE GREAT SALT WELLS.

I set out along the identical road pursued by the gallant Captain Gill, and almost on the exact day in the year chosen by that enterprising traveller, for a journey west to the salt wells.

Gravestones and mounds are the sole objects which line the road on both sides, as far as the eye can reach, for the first few miles beyond Ch'ung-k'ing. Many of the vaults are called *Shêng-chi*, and, as far as I could make out, were held to be depositaries of the bones of the people of depopulated Sz Ch'uan, erected by charitable folk after the re-conquest two hundred years ago. Among the graves were a few Man-tsz Tung, or aboriginal cave-dwellings, hardly distinguishable externally from the *Shêng-chi*. I found it very inspiriting to get a good view of the Great River again, (the Min-kiang; or, as it is usually called, even so far up, by Europeans, the Yang-tsz), and felt, as I recognized the corners round which I had turned in coming from K'i-kiang, as if each rock and rapid was an old friend. The situation of Ch'ung-k'ing is really a noble one. Lying in a curve along the middle part of an S between two bends of the Great River and the embouchure of the Ho Chou River, it resembles a leviathan ship riding uneasily in a sea of hills. The site of Ch'ung-k'ing in itself, apart from its surroundings, is somewhat like that of Rome, the main points of difference being the number of hills on which the town is built, and the fact of two rivers surrounding it, against the single Tiber twisting round one side of, or rather cutting through the Eternal City. Foochow is the only large place I have seen in China which can compare with Ch'ung-k'ing for beauty of surroundings; but the scenery there is smaller, more easily taken in by the eye, and less various. The two cities are about on a par in point of smell; Foochow, perhaps, a little the better.

The first object of note on the road is a heavy iron salt-pan, lying reversed upon a stone pillar to the right of the road, a mile

day. The *ts'z ch'iu* has a large five-pronged leaf. I saw no pomegranates, though I searched for them, and certainly enjoyed no such shade as that mentioned by Gill. Little trace of the poppy was left. If cultivated to any small extent, it must have been already gathered in, and the ground must have been re-ploughed. In some few places the stalks were still in the ground, in a withered state, feebly supporting their pale and scratched capsules which a week or two ago had gloried in fresh juice, and which now looked like a lot of seedy debauchees after a night's carouse. The dried capsule shells are burnt with the stalks for potash; the leaves used for manure, or given to the pigs; and the seeds eaten in sweetmeats, or compressed for sweet oil. It is a most valuable and paying plant. Wheat was all but ripe; broad beans and peas were either gathered in or over ripe; paddy shoots were being pulled up for transplantation in the slush, and Barbados millet (*Sorghum vulgare*, or *kao-liang*) shoots were being pulled up for transplantation on the dykes and banks. Tobacco and indigo had been transplanted some time, and were coming on; and sprouting *hwang tou*—a sort of bean,—took the place of the whilom *wan tou* (peas) along the dividing ridges. I passed one good-sized plantation of orange trees, (*kan-tsz*); and there ends the *flora* business of the day. The whole country looked prosperous, reeking, and unctuous: one thought of the Georgics, and the lusty countrymen with their lutes; but the wooden creatures on stumps, stooping in an angular way to weed the crops, soon dispelled any such poetical feeling.

We breakfasted at Sz-ch'iao P'u, 30 *li*, and tiffined at Pê-shih Yih, 60 *li* from Ch'ung-k'ing. At this latter place pan-salt was selling at 48 cash the catty, (about ten per cent dearer than at Ch'ung-k'ing), having come overland from Kiang-tsing, 65 *li* in the other direction. We put up at Tsou-ma Kang, 20 *li* more, making 80 *li* for the day.

A road to Kiang-tsing branches off from this place. Captain Gill has described the road to Ch'êng-tu so well that there is little left for me to add. The behaviour of the people leaves nothing to be desired, and is in great contrast with the obstreperous curiosity of the natives on the K'i-kiang, Fu Chou, and Nan-ch'uan routes. Yet he does not make it very clear what his daily stages were; but, judging from the descriptions he gives of places,

it seems possible that his notes were insufficient to recall to his recollection the exact succession of towns passed. Fifteen *li* from Tsou-ma Kang you pass the frontier stone marking the dividing line between Pa Hien and Pih-shan Hien, (the latter but a very small District carved in recent years out of Yung-ch'uan, of which it was a sub-district, and out of Pa Hien), at a pass called Ku-lao Kwan-k'ou. Fifteen *li* further on is Lai-fêng Yih, a flourishing market town which ought to be the first day's stage from Ch'ung-k'ing; that is, if the metropolitan road stage-rate of 400 cash a day for each chair-bearer is paid. Twenty *li* beyond this is Ting-chiang Ngao, and another twenty brings you to Ma-fang Ch'iao, a thriving place standing on a small and unnavigated river called the Kau-tung Ho, which runs from Chang-chia Ch'ang in the Yung-ch'uan District to the Great River at Yu-ch'i, or thereabouts. Between Ma-fang Ch'iao and Ta-an Ch'ang, twenty more *li*, you pass under a stone portal which again marks the boundary between Pih-shan and Yung-ch'uan. It is not at all obvious why these bounds are fixed, or how much land to the north, south, east, and west of a stone or portal belongs to each District. The inns at all the above-named places are excellent (for China), and quite equal to the hostelries on the Peking roads. The salt which we saw selling in Pih-shan was a description I had never seen before, called *shui hua yen*, as white as driven snow, and in friable blocks like the English salt, not in filthy-looking flitches like the *kuo-pa*. Both sorts come from Tsz-liu Ching, but the *shui-hua* is less condensed: its price at Ma-fang was 43 cash a catty, brought by way of Lung-ch'ang and Jung-ch'ang Districts. Fresh opium was exposed for sale in all the market towns, and always in cups and saucers. We also met numerous opium porters bearing loads of 80 catties to Ch'ung-k'ing. Native cloth, dyed and undyed, was the only other article of value I noticed; but a pound of pork for a family feast is quite sufficient inducement to bring the males of a Chinese family in solemn conclave to a village fair. The women, as in Hu Peh Province, are largely employed in spinning cotton with a very clumsy-looking wheel: beautifully white ginned and scutched cotton—cotton-wool—was selling at 360 cash the catty. The weaving appears to be done as much by men as by women.

I found more traces of the poppy to-day than yesterday, though it was evident that the maize and millet was sharing with incipient paddy the land which had, until a few days back, been covered with opium. Wheat was being cut and threshed, though it did not seem to be ripe. The flail is a pole having an axle running though its head, on the right side of which pole, and turning on the axle, are five sticks fastened together, at intervals of half an inch, with bamboo cords, and half as long as the handle. Rape was also being gathered in and threshed: also *lopu tsz* or (?) turnip-seeds. Two or three specimens of a good-sized (? Zizyphus) tree called the *kwai chao* or *kwai tsao* were pointed out to me, already in leaf. This tree brings forth an edible berry, like mistletoe, which I saw selling in the streets of Ichang last year. It is used in medicine as an astringent. Numerous orange and tea plantations were passed in the Pih-shan part of the journey; my attention was also called to a wax-tree called the *ch'a-lah* or 'tea-wax,' the leaves of which are used as tea, and are larger than those of the *pê-la;* and my informant stated that the *tung-ching*, (*Ligustrum vulgare*), and the *pê-lah** (*Fraxinus chinensis*) were not the same,† as elsewhere stated by me. I passed a rose tree called *yüeh-yüeh k'ai* or 'flower in any month,' and a number of wild red flowers called *yin-shan hung*. The dandelion was called *têng-lung ts'ao* in addition to its proper name of *p'u-kung-ying:* it is used in medicine to 'convey' other things down. A little yellow flower, now on its way to a botanist, called the *fei chu miao*, is used for poultices and burns in the Chinese pharmacopœia. A pink flower growing on a thorn is called the *ts'z li* or 'thorny plum,' (? the prickly pear), and a white spreading coruscation of small flowers the *shan lo pu* or 'mountain carrot.' I must not forget another pretty weed called the *hwo lu hwang*, and a small blue flower, or cob of small flowers, called the *hia k'u ts'ao*. A prickly hedge (common in Canton) is called the *t'ieh-lih-pa* or 'iron hedge,' and in Canton I think the *she p'ou lêk*.

* The Chinese often confound these with the *nü chën tsz*, or *Rhus succedaneum*.

† The *shui chin* of Rémusat is probably the *shui-ch'ing-kang*. If, as he states, it is the *Hibiscus syriacus*, then this is called at Canton *fût sung*, or 'Buddha's mulberry.'

At Ma-fang I jumped up to hear what I really thought was a Scotch air being executed on bagpipes. It turned out that the instrument was one called the *so-na* (here *sah-lah rh*) having the appearance of an exaggerated stethoscope: I suppose a clarinet. Very good (smoky) coal from the neighbouring hills was selling in the town for two cash the catty. The country in all other respects was as yesterday.

The next day I took it easily, breakfasting at Ch'a-tien Ch'ang, fifteen *li* from Ta-an, and settled down comfortably in a nice quiet inn at Yun-ch'uan Hien, another fifteen *li*, or two hundred in all from Ch'ung-k'ing. It is a real pleasure to travel on this main road, as the people hardly do so much as turn their heads to look at one, let alone pry noisily in at windows and holes in the roof and walls. Yung-ch'uan is to the south-west, as you surmount a pass and look down upon a little plain, at the other end of which is the city. The Chinese apply the word *tz'ao* to these valleys or basin-like plains which form so conspicuous and characteristic a feature of Sz Ch'uan scenery. The word means 'trough,' or 'channel,' and thus bears out philologically the views geologically expressed by Baron von Richthofen. There was hardly anything to be seen but paddy land the whole way. The water buffaloes, which seem to share the good-tempered gentleness of the people, pound leisurely through two feet of mire at the rate of one step every two seconds or so, every now and then affectionately coaxing the mire with their throats and cheeks, as though perfectly happy and in their native element. 'One buffalo can plough fifteen furrows in a morning,' was the somewhat vague account given by a ploughman of his fellow-worker's capacity. We met innumerable Hu Nan coolies carrying Yün Nan opium all the way to their native Province, viâ Fu Chou and Shih-nan Fu. Each coolie carried 80 catties, or about 240 dollars' worth. Great numbers of local coolies were also conveying *shui hwa* salt from Tsz-liu Ching viâ Yung-ch'ang for distribution in Pih-shan and the towns we had passed. They said it cost 240 or 250 cash the *ch'éng* of ten catties at the wells, and sold for 36 cash the catty at Pih-shan. As we approached the city of Yung-ch'ang, we found the roads thronged with villagers selling local opium to the hawkers and dealers. The unsweated (*shêng-chiang*) drug, which looked like a

mixture of treacle and pomegranate pulp, was selling for 80 cash the ounce, and the opium which had 'settled' (*hsia mien*) for 120 and 130. The rustics said they paid no duty or *likin*, but that a tax of five cash the ounce was levied at Ch'ung-k'ing. *Mien* is a local word signifying 'soft' or jelly-like. The dealers said that the soil called *ni-t'u* produced an opium of better consistency than coming from poppies grown in the sandier *sha-t'u*. The colour is the chief criterion, and the term *pao sêh*, (as with silver), is used to express the rich tawny look. Most of the opium exposed for sale was covered with a green mould called *shwang*. I passed some indigo pits of hard clay dug into the ground. The indigo leaves are soaked for a week, and then withdrawn for use as manure, the remaining liquid being mixed with lime. But this is later on in the year, and I will therefore leave this matter until I witness the industry. I also passed dyeing houses, where lengths of cotton cloth, which had been dipped in indigo, were hanging up to dry. A man, who was conveying a catty of coarse native yarn to market, said that it sold for 240 cash, or 15 cash the ounce. On being reminded that Shanghai cotton, already ginned, cost 18 cash, he said that his cotton was coarser, and only cost 13. He added that one woman spun two or three ounces a day. Being asked whether six cash (one farthing) was considered a fair day's earnings for a woman, he said that he wetted his yarn, and thus secured a profit. The only new thing in the way of plants was a vine growing, as is often seen at Peking and Canton, upon a trellis, forming a shade to the house-front. There were more ponies and mules on this road than I had ever seen before in Sz Ch'uan, the former mostly neat-limbed little creatures, resembling Corean ponies. Between Ta-an Ch'ang and Ch'a-tien Ch'ang, the long narrow blocks of stone, laid crosswise, which form the road, were for some miles cut out of red sandstone, the first time I had seen them fashioned of anything but common flag.

It was market day when we passed through the main street of Yung-ch'uan, and I never saw a busier street. *P'ipas*, or loquats were already selling, as usual with Chinese fruit, in a very unripe state, and large quantities of the triturated husk of the *fu tou*, *hu tou*, or *ts'an tou* (*Faba sativa* or broad bean) for pigs' food. This bean is not plucked until the pod has turned perfectly black.

Yung-ch'uan, like Pih-shan, is a *Kwei-ting* District, that is, one where salt-tax is levied with the land-tax, and the salt consumption left to private enterprise. Pih-shan pays about Tls. 3,000 nominal, and over Tls. 10,000 actual land-tax a year, and boasts of twelve licentiates every two years out of three. Yung-ch'uan struck me as being, after Ho Chou, the most considerable city I had seen in Sz Ch'uan, always, of course, excepting Ch'ung-k'ing. I was particularly struck with the number of opium shops. A sort of brick tea also attracted my attention: it was stated to come, *viâ* Ho-kiang Hien, from Jên-hwai in Kwei Chou, and sold for 40 cash the pound. There is nothing of exceptional topographical interest to note on the way from Yung*-ch'uan to Jung*-ch'ang Hien. At Hiang-shui Tun, 25 *li*, we came across our old friend the river which enters the Great River at Yu-ch'i; two *li* further on we crossed the same river over a long picturesque covered-in wooden bridge with stalls at both sides; this market town is called Shwang-shih Tung. The next village is Hwang-kwo Shu, 30 *li* from Yung-ch'uan. We crossed what was stated to be still the same river again at T'ai-p'ing Chên, 40 *li*, and once more at Tan-shih P'u, 53 *li* from Yung-ch'uan; but the sinuosities of this stream and the tortuosities of the road are so confusing that it is impossible to be certain whether there are two streams or one. Yu-t'ing P'u is a market town belonging to the Ta-tsu (here called *chiu*) District, a wedge of which runs down between the Yung-ch'uan and Jung-ch'ang Districts, the limits of which last are marked by two handsome boundary stones a few miles on either side of Yu-t'ing. Yung-ch'uan must be one of the most virtuous towns in China, for the environs of the town abound in stone monuments to chaste widows and exemplary men. Shih-p'an P'u is 15 *li*, and Fêng-kau P'u 30 *li* from Yu-t'ing, and there are 30 more *li* to Jung-ch'ang. Though the scenery is not remarkable, there is abundant opportunity of observing the habits and industries of the people, who fully deserve all the encomiums passed upon them by successive travellers. The limit of politeness to the east appears to be Ch'ung-k'ing; for throughout that portion of Sz Ch'uan south of the River, at least as far as Fu Chou, the people are both

* Both these words are pronounced *yün* in the Hankow and Sz Ch'uan Dialects.

curious and disagreeable. The country hereabouts is less wooded than usual, paddy fields occupying nearly the whole landscape. Of trees I noticed the jujube, usually, but incorrectly, called the 'Chinese date;' a sort of tobacco called here *ch'ieh yen* or 'brinjal tobacco,' said to be a more acrid variety; the *hung-shu*, a sort of sweet potato, I believe the *Convolvulus batatas*: it is taken up to be replanted on the banks about this time; the *yü-t'ou*, or taro, (*Colocasia antiquorum*), which are being replanted like paddy in six inches of water; and several orange orchards. I heard the invisible *kwei ku yang*, or *yang-ch'iao* singing, and can now say that it certainly is not the cuckoo: and this was the only bird I either saw or heard. Even the magpie and egret failed to put in an appearance along these hundred and odd miles from Ch'ung-k'ing. Good coal of the smoky description was selling in all the towns for what may almost literally be described as 'nothing, plus the cost of carriage.' Opium and salt of course we met in vast quantities; also the 'skin' paper from Kwei Chou, and the 'grass' paper already elsewhere described. *Haitai* or 'sea-weed' was the only commodity I observed going from Ch'ung-k'ing. I saw nowhere traces of any foreign goods, but plenty of native cloth. I took the opportunity, or rather many opportunities, of noticing closely the *lung-ku ch'e*,—the Persian wheel,* the celebrated irrigating wheel of the Chinese,—identical in shape all over the Empire. It consists of a trough of cedar wood, (*pê mu*), about twelve feet long, by one deep, and half across, open at either end. A chain of oak, (*ch'ing-kang*), having, at intervals of five or six inches, square dash-boards, about four inches square, made of willow wood, (*mu liu*), is arranged in the following way. Each link is a wedge, forked at the larger end in order to receive the smaller end of the one behind, which is fastened to it by an oak pin permitting of easy motion. The links being wedge shaped, there is no difficulty in making the dashers stick on of themselves, but these are kept additionally secure by a sort of nut. Sometimes the chain is worked by hand, at others, (when the area to be irrigated is large enough to make it worth while rigging up a frame), by feet; in both cases by two men; and in both ways

* Perhaps this term should rather be applied to the wheels I saw at Nan-ch'uan, and which I have already described.

with about equal results. When worked by hand, two wooden rollers work across either end of the trough, and each roller has fixed in it half-a-dozen or so of cogs rather smaller than the pats or dashers which they turn. The upper roller turned by two handles, one at each side, starts the chain, which turns and runs round the lower roller. The lower end of the chain and trough being in the water, of course each pat carries up with it a certain amount of water; and, as the chain revolves pretty rapidly, there is no time for the water to fall back through the intervals between the four edges of the pat and the trough before the next pat comes. At an easy rate of working, I should say that such a wheel would bring up a gallon a second, and (from enquiries made) two men would require twelve days to put six inches of water over an English acre, *i.e.* to increase by six inches the depth of water already lying on the surface. I leave it to arithmeticians to test how far these two computations will agree. When it is worked by the feet, the chain is turned by an axle fixed to a frame standing beyond the upper end of the trough. The outer ends of the axle or roller have made fast in each end of them four pieces of wood exactly like croquet mallets, two for each foot, the shank of the right foot mallets being at right-angles with the shank of the left foot two. The axle is prolonged both ways so as to support a pair of poles, joining which is a bar, on which the men can lean as do prisoners working on a tread-mill. They take about one step a second with each foot, and keep it up for hours together. With the hand they can work much quicker, but the exertion is more painful. I estimate, from what I saw and was told, that a water-buffalo would require from ten days to a month to plough an acre of land, according to the quantity of water and the adhesiveness of the paddy-land; but the largest 'fields' are not more than a rood in area, and as a rule the divisions are very much smaller. The plough used here is the same as the primitive implement I saw in Kwei Chou, and have already described. The share lies flat, and is pointed in front and broad behind, curving slightly upward to perform the office of a mould-board, which office the guider furthers by moving the plough from side to side. The 'harrow' used for paddy, is simply a rake (*pa*), six feet

broad, with wooden teeth a foot deep. I saw to-day a human plough consisting of a pole ten feet long borne over the shoulder of one man, and made fast, in a way I cannot now recall, to the plough guided by another. It was a painful sight to see the poor fellow plunging through the mire. Harrow, plough, or wheel, with all appurtenances, can each of them easily be carried by one man.

Another interesting study to-day was the manufacture of *sha-kwo* or 'sand pans,' a species of clay pot, made out of clay mixed with coal ashes, and with potash obtained from the burning of *sung* tree leaves (*Pinus* species). When 'cooked,' they have an appearance between black-lead and cast-iron. They are exceedingly cheap,—about a halfpenny each,—and will boil water as well as any other pot. The market-town of Hao-tsz K'ou (Yung-ch'uan) is said to be celebrated for its superior pots, but I saw the manufacture going on in many villages.

The pigs in this region are on particularly affectionate terms with the human race. The pig at the fair with a wisp of straw round his neck; the sucking pig being tenderly carried to market and lying down in an ecstasy of comfort whilst he is awaiting a purchaser,—are amusing and daily Chinese sights. Broadly speaking, pork may be said to be the only, and the universal meat food of the Chinese.

The district-city of Jung-ch'ang is even more extensive than that of Yang-ch'uan, and its main street is at least a mile long. With the exception of opium, *mapu*, and *hiapu*, or the cloth made out of hemp and the *Boehmeria nivea*, it does not appear to produce much of commercial value. Fans fashioned out of the Kwei Chow 'skin' paper are exported in considerable numbers. By the way, I omitted to state that there is a considerable export of bulrush fans from Pé-shih Yih, the sub-district of Pa Hien which we passed on our first day's journey. These reeds,* (*Lepironia mucronata*), are specially cultivated for the purpose, and, when their growth becomes thick and rank, are replanted in paddy-land about the first moon. In cheap *articles de vertu* of all descriptions the skill and taste of the Chinese is unexceptionable.

* See Dr. Hance's dissertation in the Journal of Botany for April, 1879.

Jung-ch'ang Hien pays (it is said) an actual total land-tax of about Tls. 70,000 a year, but what the nominal amount is I was unable to ascertain. It boasts of twelve original and six new licentiate vacancies, and frees itself from the salt-tax by setting apart certain public lands, the profits of which are devoted to this purpose. *Shui-hua* salt was selling for 31 cash the catty. The river which Captain Gill mentions is navigable in sections for small boats down to Fu Shih on the Lu Chou River, forty *li* above Lu Chou; but at that point, or, rather, at a place called Fu-tsz Ch'ang, a few *li* above Fu Shih, there is an obstruction in the shape of a rapid, which I shall doubtless see or hear more of when I get there. Above Jung-ch'ang the river is navigable for 60 *li*, the 'ports' being San-chia Ch'ang and Lung-shui Chên: at Yü K'ou, in the Ta-tsu District, navigation ceases. None but small wherries ply on this river. According to further and closer enquiries made respecting the puzzling rivers of the last few days, the river which enters the Yang-tsze at Yu-ch'i comes from Lai-fêng Yih; and, now that I come to think of it, I remember passing at that place under a long covered bridge, which (being the first of its kind I had seen) I mistook for a bazaar or arcade. Rivers also enter the Great River at Fu-hsin Ch'ang and Lo-han Ch'ang; but whence these rivers come is a question the settlement of which I shall postpone until I descend the River. The places between Jung-ch'ang and Lung-ch'ang are Meng-tsz K'iao, 20 *li*; Shao-chiu Fang, 15 *li* more, (an immensely long market town); Tsiang-chia Sz, where there are two stone portals to mark the boundary between the two Districts, also 15 *li*; and Li-shih Chên, 7 *li*. Future travellers may assure themselves that Lung-ch'ang is an easy four days' travelling from Ch'ung-k'ing; though (especially if the traveller is ignorant of the language) the coolies, owing to the frequency of good inns, try to make each stage longer than it is. Along this last stage there are numerous stone pillars, set up by a benevolent magistrate wherever there is a burial ground, warning people not to cut grass or graze their cattle. These cemeteries are the only pieces of grass left amid a sea of paddy-land. In the street stalls I noticed some very coarse sulphur exposed for sale, having almost the appearance of slag. Also

gypsum, used in the making of bean-curd in the proportion of one in twenty. Also a peculiar bean* reminding me of the *Hovenia dulcis*; it was called *shih chün tsz*, and was said to be used for children, to cure pains in the bowels. A red burnt clay which attracted my notice was obtained from the mountains, and used with *t'ung* oil to manufacture a dull red-coloured paint for doors and panels. Sulphate of copper is used in the same way. Of new plants I only noticed the *t'ien chiao*, a variety of ('sweet') buckwheat: it is not considered so good as the *k'u chiao* or 'bitter' variety, (*Polygonum tartaricum* and *fagopyrum* respectively). Firs and pines had become rare; cedars fewer; bamboos as usual. Of fruit trees I noticed the plum, orange, and jujube, all in fresh new leaf. The only tree in flower was the *ye-hoh*, or *Magnolia pumila*.

At Lung-ch'ang I appear to have lodged in the identical inn and room which extracted encomiums from Capt. Gill. There was the vine, and not only that, but a small retiring room. This inn is said to be celebrated all over official China for its 'best room;' and as it is really the very best I have ever seen in inhospitable Cathay, I will describe the chief apartment in question. The floor is the cold cold ground, and the spaces between the threshold and the earth would easily admit a large cat. The walls are of varnished poles and beams (laid across others in the Cheshire fashion), containing earth and whitewash in the square spaces between them: they are smudged here and there, and contain full many a hole and crevice; but are not exactly what would be called dirty. The roof consists of tiles lying upon joists and rafters. The lower windows consist of coloured paper in what the Chinese call 'ice-crack' or zigzaggery frames, and have not more than a dozen holes; the upper windows are of dirty white paper full of rents and holes, pasted over a square wooden pattern. The furniture consists of a flat wooden *k'ang*, or couch, resembling a small stage, and covered with one thin rush mat. Two half-moon tables, with a full complement of legs, but with broken foot-boards and stretching-bars. Four rigid wooden arm-chairs; two wooden teapoys; and a square wooden table,—all with legs complete.

* This appears to be the *Quisqualis sinensis* or *glabra*.

Room fifteen feet square, and twenty high: ordinary sleeping apartments on each side, with doors which both shut and lock; and the vineyard behind. This is the best inn in China.

At Sz yüan Ch'ao, about halfway between Li-shih Chên and Lung-ch'ang, we crossed a small river which is said to join the Lu-chou River near Fu-shun Hien. A great many mules, horses, and cattle were coming from the city with loads of produce. Just before arriving at Lung-ch'ang, we passed the end of a road running south: this is the high-road to Lu Chou, 150 *li* distant.

Lung-ch'ang Hien is a small District, carved out, at the beginning of the present Dynasty from the two Districts and the Department of Yung-ch'ang, Fu-shun, and Lu Chou: it is now subordinate to the Prefecture of Sü-chou Fu (Sui Fu). Ten licentiates were first allotted to it, until the time of the recent wars under the reign of Hien Fêng, when, in return for more or less voluntary contributions to the military chest, the number was, in common with that of many other Districts, raised to thirteen. Its nominal land-tax is Tls. 7,000, but, what with extras (*ching tieh*), and levies (*chüan p'ai*), between Tls. 20,000 and Tls. 30,000 are actually collected. The District city is a busy-looking place, but I could not find out that any particular branch of trade was exceptionally important. Grass-cloth (*hia-pu*) and a coarser cloth (*ma-pu*) are made in considerable quantities, and I noticed numerous patches of the *Boehmeria nivea* (*chu-ma*), and the *Sida* or *Abutilon* (?) (*hwang-ma*) along the highways. The *hwang-ma* was only just being sown, but the *chu-ma* was well advanced. There were also numerous patches of *p'u-ts'ao*, (*Lepironia*), and *têng-tsao*, (*Scirpus* capsularis*), three cuttings of both of which are obtained a year: after two or three years these grasses must be transplanted into new paddy-land. After each few years the *chu-ma* also becomes exhausted and requires manuring. It is gathered in at the same time as the *kau-liang*, (*Sorghum vulgare*), in the eighth moon. *Kau-liang* and *hwang-tou*, 'yellow beans,' were in their earliest stage, and filled up most of the divisions between the paddy-fields. Tobacco was coming on; sweet buckwheat put in an appearance here and there; and *han-ts'ai*, a sort

* I believe *Juncus effusus* has been pronounced more correct.

of spinach, *tung-han ts'ai*, (? *Sedum*), *hung hao* (elsewhere *hung shu* or *sho*), and *tung hao*, a sort of celery, were the remaining vegetables, all in an early stage. Trees as usual; no new ones observed. Rice everywhere. There were not very many traces of the poppy, though it is impossible to speak with certainty, as the crop was already in. Anyhow, Lung-ch'ang does not produce nearly so much opium as Jung-ch'ang or Yung-ch'uan, each of which is on a par with Pa Hien. The salt consumed is all *shui hwa*, which is quite untaxed after leaving the wells, and sells at Lung-ch'ang for 28 cash. Immense numbers of coolies trooped along the roads, both from Lung-ch'ang eastward, and from Tsz-liu Ching to Lung-ch'ang, with pole-loads of salt.

The eastern suburb is separated from the city by a branch of the Niu-fu Tu River, or T'o Kiang which branch here runs north and south beneath a bridge leading to the city gate. The road to Tsz-liu Ching turns off sharp to the left, just before the bridge is crossed, and runs for a short distance along the left bank, crossing by another bridge a little lower down. This branch of the Niu-fu Tu River is stated to come from Kwan-yin Ch'iao (in the District of Yoh-chih), about 150 *li* from Lung-ch'ang. At Wang-shên P'u, five *li* from Lung-ch'ang, along the Tsz-liu Ching road, a branch way goes off to Chia-ming Chên, 35 *li* from Lung-ch'ang, and a Sub-department of the independent Department of Lu Chou. We took the other branch, and put up for the night in a very tolerable inn at Lung-shih Chên, 30 *li* from Lung-ch'ang. The only objection to my room, was that it was lightly built immediately over a pig-sty; and as pig-sties are, for sanitary purposes, usually built over something still worse, it may be imagined that my lungs were not pampered during the night. We crossed two small streams, one just beyond, and one some miles beyond this town; and another (a good broad one) shortly before arriving at Wang-chia Ch'ang, 30 more *li*, all of them running southwards. At Niu-fu Tu we crossed the river, (the boundary between the Districts of Lung-ch'ang and Fu-shun is five *li* eastward of Niu-fu Tu,) by a free ferry boat, many of which are plying at that point, under the superintendence of an office on the Fu-shun bank. It seems to me impossible that, as many Chinese say, this river can be the same as the one

that we crossed at Lung-ch'ang; the latter must be a tributary. In fact they are not the same, for the Niu-fu Tu is navigable, or communicates with navigable rivers up to within sixty *li* of Ch'êng-tu; that is, to a place called Erh-chiang T'o, under the Kin-t'ang District. Passengers, however, take boats at Shih Ch'iao (under Kien Chou) sixty *li* lower down; but most passengers from Ch'êng-tu for the Great River go by the Kia-ting River. Hsin-t'ien P'u is 30 *li* from Niu-fu Tu, and Hsüan T'an is 25 *li* more, making about 140 in all from Lung-ch'ang; the road is good nearly the whole way, though narrow; the inns are mostly wretched; the country uninteresting; the people civil. My room at Hsüan T'an was lightly built over the town sewer. A great quantity of sugar is grown along this road; other crops as before, hemp, wheat, tall millet, maize, and paddy. In addition to yellow beans, I observed *lü tou* or 'green pulse,' and *fan tou* (? *Cajanus indicus*) or 'rice pulse,' (both leguminous plants), just coming up. Coir,* peaches in early fruit, a few apricot and walnut trees, cedars, banyans, bamboos, &c., as before. Also a good many of the *k'u lien-tsz*, (*Melia azedarach*), and *yê-hoh*, (or *Magnolia pumila*). I think I saw one ash, but neither I nor the Chinese were sure. Of flowers I recognized both by look and name one only, the *Leonurus sibiricus*, or *yih-mu ts'ao*. I also gathered a dozen specimens of wild flowers, the names of which I give below, and I hope shortly to be able to add the botanical names.† *Wu-shih-hwa*, *Kwo-chiang-t'êng*, *Chieh-êrh-kên*, *Swan-chiang-ts'ao*, *Luh-ch'üoh-'rh-ts'ao*, *Hwang-kou-t'ou*, *Wo-sên*, *Nyo-chü-p'o*, *Ch'in-ming-ts'ai*, *Shui-pa-chiao*, *ya-shê-t'iao*, *Ye-lo-pu*. I noticed a new vegetable called *T'ien-sien-mi*, which is used in the manufacture of a wine called *lao tsao*, and is here sold locally at 70 cash the quart. Of wheat the usual kind is the *siao mé*, which seems to me exactly like our English wheat; but there is a larger and more bearded description called *ta mé* or *nan mé*, which perhaps is barley: it will also be remembered that near Mu-tung we came across a third variety. Wine was the only thing conveyed the way we went; coolies bringing

* I should mention that, hitherto, I have in my previous papers inadvertently spoken of coir as jute. Perhaps *hwang ma* is jute. See *ante*.

† See Botanical List.

salt to Lung-ch'ang carry also two empty wine-baskets, the remains of their load the other way. The numerous workmen at Tsz-liu Ching would seem to drink almost as much wine as they export salt, at least in this direction. Coolies for Pih-shan, &c., carried no empty wine baskets. These latter said they paid 24 cash for the 20 ounce catty at the wells, and sold it for 34 cash at Pih-shan.

Instead of going part of the way to Tsz-liu Ching up the river, as was done by Captain Gill, I went the whole way by land, stopping for early breakfast at Kan-tsz Ngao, 20 *li* from Hsien or Hsüan T'an, and half way between it and the wells. The road is uninteresting, at all events to one to whom travelling in Sz Ch'uan is no novelty. The expanses of grass in the neighbourhood of the well-districts, which puzzled the traveller just referred to, are not difficult of explanation. In the first place, so large a number of water-buffaloes are employed at Tsz-liu Ching, that fodder is purchased very readily at high rates, so that it pays better to grow grass than to cultivate vegetables. In the second place, scruples about graves and ancestors soon vanish where solid profit is concerned. Rice straw sells at the wells for about a half-penny a pound; fresh grass a little cheaper. Enormous quantities of broad beans are also imported by the salt junks for the use of the cattle, the cost of maintaining each head of which is something over 300 cash a day.

Tsz-liu Ching is a Sub-district of Fu-shun Hien and stands on both banks of a small river which runs into the Niu-fu Tu River at Tsên-chi K'ou, five *li* below Têng-ching Kwan. It forms an equilateral triangle with Fu-shun and Niu-fu Tu, all three places being 90 *li* from each other. Têng-ching Kwan is a large market-town (also under Fu-shun Hien), where trans-shipments of salt from the smaller into the larger junks take place.

Judging from the appearance of the straggling villages and markets which together make up what is called Tsz-liu Ching, and judging from the number of wells, which, working or not, no one estimates at fewer than five thousand, though they are officially reported as 1,200, I should put the population down at a quarter of a million at the very least. The area which I saw covered with boiling-sheds and well-apparatus was certainly four square

miles, and I by no means saw the whole. Besides, there is a large *chai-tsz*, or fortified retreat upon a hill, built by a local magnate at the time of the Shih Ta-k'ai (T'ai-p'ing) rebellion, which is thickly inhabited, and beyond which there are other wells.

The majority of the wells are from 2,000 to 3,000 feet deep, and they all seem to be bored on the same principle. A few much shallower wells do not yield plentiful supplies of brine. The fact of some wells having both water and others only brine, or only gas, seems to require more explanation than has been given by former travellers. According to my understanding of the accounts locally given, the quality of the brine has nothing to do with the gas question, and gas may suddenly make its appearance from a well which never had any before, or the supply from which had ceased; or it may suddenly cease after coming up freely for years. As to the wells 'which have gas but no brine,' this simply means that, on the first striking of the brine, the gas generally rushes up with such force as to make it impossible for some time to put anything down the well. Though the mouth is not more than six inches in diameter, the force of the rising hydrogen, (for such a very old European resident in Ta Ch'uan assures me it simply is), is sufficient to cut a man's head or limbs clean off, or to drive an iron pan weighing over a ton, high up into the air. This gas therefore has first to be consumed, and to a great extent exhausted; and this is done by boring small holes in the side of the well near the surface, and joining on to these holes underground bamboo tubes, which, again, can be subdivided to any degree. The mouth of the well is then covered, and the gas distributes its force over these tubes, the other ends of which are conducted to a safe place and ignited until the force of the uprushing gas is reduced. I saw one well in this condition. The gas was carried along two main pipes, strongly covered with clay, which carried the gas into two sets of a score or so of smaller jets, each of which had been burning night and day for a long period, and each of which, when its power should have been reduced, would still be able to supply perpetual fire for several pans. The waste seems enormous. Some wells which have more fire than their proprietors can use, sell the gas to neighbouring wells. Those jets I saw were let out at a yearly rental for each jet of

between Tls. 40 and Tls. 50; and as there were seventy pans in the establishment, the owner of the fire-gas would make a handsome sum out of that alone. It is only the fiercest jets of fire that are sufficient to boil the hard pan-salt, or *kwo-pa;* the jets of ordinary vigour are employed in boiling the *shui kwa* or granular salt. The gas, when in use, although it burns with a flame sufficient to evaporate in one day enough brine to make a six-hundred pound lump of salt in a three-inch thick pan, is, when extinguished, easily kept down with a small stone placed over the jet. The row of jets are extinguished 'negatively,' that is, gas is allowed to escape into the air through two funnels built in the conduit outside the boiling-shed, which funnels, too, are, when the jets are burning, stoppered with a pair of simple paving-stones. The furnace over which each pan is placed is a hole about five feet in diameter by six feet in depth. In the large sheds there are two rows of pans, thirty-five in each row, and the two gas conduits, joining outside into one, lead underneath the pans. The hole through which the gas is admitted by the jet is not more, I think, than half an inch in diameter. The brine trickles slowly and perpetually into the pans from large wooden reservoirs, covered with clay, resembling huge 'pipes' of wine. There are about half-a-dozen pans to each reservoir, and the brine enters the reservoir at the top along a conduit leading from the well. The bamboo half pipes which conduct the trickling brine from a hole or tap in the side of the cask or reservoir to each pan, are movable, so that the supply can be checked at any moment. One man appears to look after each cask and its pans. The wages are high, —six to seven strings of cash a month, and food found;—say £2 a month in all. The day's work is 24 hours, and each workman rests and works on alternate days. One pan is not quite able to produce a *pao*, or pan-ful a day. To take one boiler as an instance; seventy pans produced fifty *pao* a day. A *pao* of granular salt is 220 catties; so that about 11,000 catties, or, say, seven tons a day, would be about the production of the place. The salt, when turned into hampers, bites and coheres, and is sawn into four triangular portions, two of which form the load of the numerous coolies we met between Pih-shan and Tsz-liu Ching. The price at the *tsao-fang*, or boiler's, is 18 cash the catty; but the *likin*

of six cash brings the cost price to the coolie up to 24. The brine is not all of the same quality; the term *han-t'ou* or 'degree of saltness' is used to distinguish. The blackest brine is the best, and the yellowest the worst. Twenty per cent. or more of salt is got from the best, and ten or less from the worst. The price of the brine varies from one to three mace the *tan* of about 200 catties. At one boiler's, I was told that twelve *tan* or loads of brine were required to produce 240 catties of *kwo* salt. This would leave (at the rate of two mace or 300 cash a load of brine) about 700 cash profit on each pan *per diem*, out of which the pay of the man, the cost of hiring the fire jet, and the wear and tear must be deducted. The boilers sell (under the present system to the Government) by the *pao*; but fifty *pao* make the warrant or *yin*, which is the unit usually used in the junk carrying trade. The *kwo-pa*, or pan salt, is evaporated until it becomes as hard as stone, and each pan turns out a cake weighing over 500 catties; this is split into four quarters, and each quarter, with some fragments added, forms a *pao*, or 160 catties of pan-salt, such as I saw on the Sung-k'an River. I could not find out exactly how long it took to make a cake of *kwo-pa*: indeed it was most difficult to extract any precise information from anybody; and as it was I worked myself up frequently into a heated state in hammering out the little I got. Apparently, about half the total production of Tsz-liu Ching is pan, and half granular salt. Between each row of pans or furnaces runs a lane, on the level of the jets, and six feet below the ordinary ground, *i.e.* the 'floor,' for the ground and the floor are convertible terms in China. The heat from the furnaces is of course very great, and in summer must be nearly insufferable. The roof however is high, and built overlapping, so as to well ventilate the place. I did not notice much smell from the burning gas, but the fresh brine and the unburnt gas both smelt to me like a mixture of rotten eggs and coal gas. The brine, in the course of boiling, out of total solid matter produced, gives one half of *tan-pa* or 'gall-cake,' and one half of sweet salt. I did not discover the term gall-cake, nor did I see the material until I had quitted the town; but I suspect that it is the same thing as the *p'ao*, or scum, which forms on the top of the boiling brine, and the secretion of which is facilitated by pouring in about half-a-gallon

a day of *tou chiang* or *tou-hwa*, (the curd and whey of beans unseparated). On the other hand, I was distinctly told at the wells that the *p'ao* was boiled again, and yielded a fair proportion of salt, whereas the *tan-pa* is acrid and uneatable. It is sold at the wells at six cash the catty, and is used to separate the curd from the whey of bean-juice; to 'bind' plaster and paint, &c, &c. Thus it is give and take with the bean-juice and the brine.

The wells are very interesting. A pair of immense shears, patched, shored up, and steadied by stays and guys, stand over the well mouth. At the top of the shears is a wheel or pulley, from which descends the bamboo rope which supports the bucket. The bucket is a long bamboo or lengths of bamboos almost as high as the shears. It is strengthened all along by having hempen cord wound round convolutions cut round its skin, and has iron rings at the two ends. The bottom of the bucket is pared off and and cut into four prongs, I suppose, so as to protect the valve and present a small surface in descending: also, perhaps, to facilitate picking up in case of accident. The valve is a strong piece of skin, opening inward, and can just be felt by a finger thrust up between any one of the prongs. When the bucket is raised, a man lifts up the valve, not with his finger, (which would be difficult if not impossible), but with a sort of scoop or trowel fitting round the bamboo and having on its inner surface a nail or spike for the purpose of running between the prongs. Even with this instrument the lifting requires an effort, for there are 250 pounds of water, in a tube not thicker than a brandy bottle, pressing upon the valve. The end of the bucket is veered over a tub in the ground hard by, which leads through a conduit, and through a rough filter, to a large pit or reservoir kept under lock and key. Hence the water is sold, and hence conducted to the boilers by conduits, most of which work upon the simple difference of level; for the place is very much cut up and hilly. I did not see any of the other brine-raising wheels described by Captain Gill, but they are evidently built on the same principle as the irrigating wheel of Nan-ch'uan, which I have explained in another place. The rope which ascends to and goes over the wheel which I saw descends at a (double) angle of about fifteen degrees to the under face of another wheel about six feet in diameter, and having

a hollow iron tire. From this the rope runs horizontally, from first to last always in the same direction, to the circumference of a decagonal wheel sunk in the ground. This wheel is built exactly on the principle of a teetotum. One end of the axle, (a broad beam with iron-covered ends), sinks a foot deep into an iron socket, and the other end runs up into a similar socket let into a huge beam made fast to the building generally. From the axle run out several score of spokes, one above the other (but not so as to be in a line with each other); and perpendicular posts run up from the outer end of these spokes to a number of large spokes at top and bottom which complete the teetotum, and of course also join on to the axle. The depth of each well is easily ascertained by counting the number of times the rope goes round the teetotum, taking the diameter, and multiplying by three. An arrangement of bars, tied together at each two or three alternate spokes, permits of a buffalo being harnessed by a rope trace to a protruding pole, and four buffaloes are required to each teetotum. Each buffalo has a driver, who belabours the wretched animal with a piece of rope held in one hand and clings to his tail with the other. The buffalo has also a cord halter running through his nostril, and so tied to the wheel that he gets a tweak if he lags behind. At first the animals walk at a brisk pace round and round, but, as the work progresses, they are egged on into a trot, and it is really a painful sight to see the great patient brutes panting and puffing, labouring and straining, with the exertion. It takes about twelve minutes to haul a bucket up 2,500 feet, and a series of skin tongues and straw markers distributed over the last hundred yards of rope, as on a log-line, gives the necessary warning to the drivers, who then slip two of the buffaloes and finish up with the remaining pair. The emptying of the bucket only occupies a few seconds; fresh buffaloes are harnessed to every second turn, and so the work goes on. The huge teetotum wheel of course revolves with terrible speed and force as the bucket gains impetus in its descent, but a brake, called a *ma mei*, in the shape of flat bamboos gradually tapering into a rope at the two ends, is made fast to the walls or any other secure place, whilst the flat part runs half or three-quarters round the wheel. When there are only a few coils left, a coolie in charge sits on or presses this brake,

which at once checks and soon stops the wheel. I inquired, and was told that the wheel never caught fire. Each set of buffaloes hauls up two buckets in succession, and is harnessed-to four or five times during the 24 hours. Once a day the animal is taken to the river, where he takes his pleasure after the day's work. The buffaloes, as well as the shippons, are beautifully clean. They are well fed on broad beans and straw or grass, and cost between 300 and 400 cash a day to feed. A robust young buffalo is worth between Tls. 30 and Tls. 40; between the ages of 7 and 10 years, from Tls. 7 to Tls. 20. They never breed in the well establishments. Their refuse is carefully collected and mixed up with straw, and sells for four cash the cake of about (I should think) two catties. These cakes hang about the insides and outsides of the sheds and houses, line the highways, and are generally ubiquitous. The bamboo lines which haul up the bucket are twisted like hemp ropes, and spliced with strong hide thongs. When they break, the bucket or line is fished for with a grapnel, of which numbers are kept of every imaginable size and shape, so as to lose no chance of catching the lost bucket. If it cannot be caught there is nothing for it but to hammer it away in pieces, like the rock through which the well is bored. A steel or iron hammer, with a long bulbous top ingeniously fitted into a split bamboo, the ends of which are then tied round its thin end, is suspended like the bucket; except that in this case the bamboo rope is simply a succession of flat strips, which, probably, as in the case of the *ma mei*, withstand jerks better than twisted cord. I was present when one of these hammers was hauled up; it had been considerably blunted, and was at once taken away to be repaired. The end is like a closed fist with two short horns. A short bucket was then sent down to bring up the *débris*. I understood the man to say that this well had been boring for 70 years, at the rate of two inches a day. But there is no uniformity in the time taken to bore through.

The cedar-wood lining which Richthofen refers to, and which Captain Gill did not see, is in this wise. Just below the surface, and extending 300 feet down, there is such a lining, the object of which is to prevent the *yang shui*, or 'positive water,' or 'earth water,' which percolates through the earth, from descending the

well and mixing with the *yin shui*, or 'negative water,' or water from the nether regions, *i.e.* the brine. The top of the well is always capped with a stone or flag; and, moreover, there is an open interval below the flag top extending a few feet lower down, through which the gas is conducted horizontally; so that this cedar-wood lining is not often visible. The largest well employs 150 buffaloes, and the smallest boiler has but two or three pans. These pans I have already alluded to in my account of the K'i-kiang River. The boiler is obliged to return the iron, or, as he puts it, 'he buys the pan only, not the iron' for Tls. 40. Some said Tls. 25; but perhaps different thicknesses are required for different kinds of salt; this is a point upon which I omitted to enquire.

Kung Tsing is a Sub-district of the Magistracy of Yung Hien, and is five miles above Tsz-liu Ching. Its production is unimportant as compared with the latter, and, besides, there is no gas; coal has to be burnt. The supply of brine at Tsz-liu Ching being apparently inexhaustible, (though individual wells occasionally dry up), it is not very clear why part of the Kung Tsing brine is brought at enormous expense down to Tsz-liu Ching for evaporation. The only explanation I could get was quite a Chinese one; that the District had to consume a certain quantity of brine every year, in order that the Government might collect the fixed tax upon it. The brine is not brought down in boats, as stated by Captain Gill,—for the river is obstructed by rocks, and quite unnavigable just above and beyond Tsz-liu Ching,—but is carried down along numerous bamboo conduits, the erection of which has cost £3,000 apiece. Pan-salt from Kung Tsing is brought down to Tsz-liu Ching on mules and horses, and then shipped into boats. The dams of which Captain Gill speaks are lower down the river, and answer the purpose of our locks. Three of them are of stone, and a larger number of wood, like those in the Saône at Lyons. These are kept shut, in order to allow the water to collect; and every five days a fleet of junks,—from fifty to a hundred or more,—starts from Tsz-liu Ching in order to pass the weirs (*yen*) at the same time, and thus economise the water. I happened to arrive at Yen T'an or Yüan T'an, (45 *li* from Tsz-liu Ching). on my way back, just at the moment that the dam at

that point was opened (*k'ai yen*). A hundred junks or so were lying in the river above the dam, the level of which was about a foot above the river below. The river and the dam were about 100 yards across, and the flood-gate consisted of one or two logs, which were lifted by a single coolie. The water rushed down and the junks went with it one after the other in Indian file, or, as the Chinese say, 'as the geese fly, and the fishes swim.' These junks are hideous flat-bottomed craft, each carrying three *yin*, or about 18 tons of salt, and not drawing more than a foot or so of water, if that; even then they require lighters to take part of their cargo through the flood-gate. At Têng-ching Kwan, five *li* above the point where the Tsz-liu Ching River enters the Fu-shun or Niu-fu Tu River, the salt is transhipped into the largest-sized junks. The freight from Tsz-liu Ching to Têng-ching Kwan (only 100 *li* or so) is 70,000 cash the *tsai*, or 'cargo,' of 450 *pao*, or packages, of granular salt. The well catty is a sort of baker's dozen, that is, 10 catties are really 12; so that 540 times 220 catties, or, say 75 tons of salt are carried for, say, sixty dollars;—a very high freight. But the quickest passage occupies five days, and sometimes a fleet of junks has to wait weeks for water; so that, after all, the rate is not excessive. The freight from Têng-ching Kwan to Lu Chou on the Great River is 120 to 200 cash the *pao* for granular salt, and about 25 per cent. less for pan-salt. A *tsai* of pan-salt is distributed over four well junks; and the weight of each *tsai* is twelve *yin* of 50 *pao*, each *pao* weighing 167 catties gross, or 160½ net delivered at Ch'ung-k'ing; so that in each case the *tsai* is the same, namely about 100,000 catties. The largest Great River junks cannot carry more than one *tsai* of salt. The real profits made by the boilers, they are of course not likely to disclose; however, one of them informed me that he considered himself lucky if he made a clear Tls. 5 the *yin*, or, say, a cash a pound. He turned out over 300 *yin* a year. Tls. 1,500 a year would be a large Chinese fortune, but it must be remembered that these boiling houses are large family vested interests, the estimates on which are matters for cyclic rather than annual calculation. According to him, the wells of Tsz-liu Ching were known to K'ung Ming 2,000 years ago. The two great owning families are now the *Li* and the *Wang*, who own a great many wells and boilers. I

happened to cross-question both a *Wang* and a *Li*. The above information is chiefly from *Li*. The *Wang*, in whose establishment I was, had 40 pans, which produced about 20 *yin* a month. Half his pans were for pan-salt, and half for granular. He said he sold his pan-salt to the Government at from Tls. 90 to Tls. 100 the *yin*. This is about one quarter of the price of the same salt we saw selling at Wu-ch'uan in Kwei Chou.

Instead of going to Tsz-liu Ching direct from Lung-ch'ang, you may go *viâ* Fu-shun, the stages being Lo-tsz T'an, 20; Fu-chia Ch'iao, 15; Tai-chia Sz, 30; Kau-shih K'an, 30; the ferry on the left bank, 20; and across to Fu-shun, 5; 120 *li* in all, proceeding thence to Tsz-liu Ching the way we came back. We passed Ts'z-pa Ngao, 18; Sha-p'ing, 12; Yüan-t'an, 15; Chang-chia Ching, 20; here cross in boats to the left bank of the river to Fu-shan, 30. Chang-chia Ching is 15 *li* from Teng-ching Kwan. On the way we met *Kuo-sih*, or pewter carrying the shape of the pans in which it was smelted: this is the best kind of Yün Nan pewter or, rather, tin: it comes by way of Sui Fu, where the price is 160 cash the catty. We also met numerous men and animals carrying beans and straw to the wells, and several coolies with loads of medicine, *t'ien tung*, (*Asparagus lucidus*), *ts'ang-chuh*,* (*Atractyloides rubra?*), both of which are said to come *viâ* Ch'ung-k'ing down the Ho Chou River from the northern part of the Province. Between Chang-chia Ching and Fu-shun the half-way station is Ts'ao-tien P'u. Fu-shun is also 15 *li* across by land to Teng-ching Kwan.

At one of the country towns we met an old lady and her son who were tramping all the way to Lin-shui Hien beyond Ho Chou. They had no cash, and the old dame offered her umbrella for sale. Such an event caused a great deal of interest at the inn, and a considerable time was spent in examining the 'points' of the umbrella, and appraising its value. Each villager overhauled it with a thoughtful air, and gave his opinion. Finally, it was decided to be worth sixpence. Then the beldame wanted to know if sixpence would take her and her son to Lin-shui, seven days' journey, and the public voice announced to her that twopence half-penny a-day

* The last, *ts'ang-chuh*, comes from Mao-shan in Che Kiang.

was the least each of them would require for respectable board and lodging; three shillings was a power of money, but three shillings must be borrowed, found, or obtained in some way. Just as I was on the point of ordering up 1,000 cash to settle the question, the youth hauled out a lump of silver, and ordered it to be weighed. Meanwhile the landlord had set a bowl of rice before the old lady, with some soothing remark which meant, 'pay or not as you like.' On another occasion, I saw an old lady politely handed out of her chair by an innkeeper, although she was not going to patronise the inn to a greater extent than a cup of tea. Such scenes are not common (within my experience) in China. Young women would not share these attentions, because they are more or less under a taboo, but old ladies seem to be treated with some deference, rather, I fancy, on account of their age than of their sex. In fact, old women are no mean persons in China, for they exact all that is due to both age and sex, and are not by any means rashly to be meddled with. The villagers know this well, and keep them in hand as a reserve force, or a big gun, to be brought out only on the gravest occasions. An old woman with a pail in her hand, and a tongue well practised in harangue, has been known to rout even a dignified official in his chair; and within time to which the short memory of European residents in China reacheth, a *taotai* and a Consul have been ignominiously driven from the field by an ancient virago thus equipped.

The villagers and townsmen between Lung-ch'ang, Tsz-liu Ching, and Fu-shun are gentle and inoffensive, but they begin to get curious as soon as ever you leave the grand trunk road; the inns, too, become filthy in like proportion. At Hsien T'an my room, as I have said, was built over the open town sewer, with no flooring but loose boards; I could see the black and reeking ooze down below.

Fu-shun is a busy-looking city on the right bank of the Niu-fu Tu River, and subject to the Prefecture of Sü-chou. Sugar and wine, (besides salt), seem to be its chief articles of trade; there is not much opium grown in the District. Tobacco from Si Pa, (the plain of Ch'êng-tu, as Nan Pa is that of Sui-lin), [illegible]r from Nei-kiang, and salt from Tsz-liu Ching are the chief [illegible]nward freights. Cotton from Ch'ung-k'ing, and coal from

various places on the river bound upward to Kung Tsing, Fu-shun, Tsz Chou, and Nei-kiang (where there is no coal) were the chief upward freights. There seems to be no iron nearer than the K'i-kiang River, from Kiang K'ou at the mouth of which all the iron consumed in this locality comes. The immense trade in salt pans is conducted as follows. The iron caster lays down the pans, weighing 1,200 catties apiece, at prices varying from Tls. 40 to Tls. 50, according to prevailing rates. The purchaser undertakes to return the pans gratis when worn out, and the caster pays the freight back. It requires sixteen coolies to carry one pan from the boat to the wells, and for this purpose thick beams are used, to which the pan is slung. Gypsum is imported from Mei Chou, (180 *li* from Ch'êng-tu), where it costs two cash the catty; at Fu-shun it sells for four. All sorts of junks ply on the river, except the crooked sterns from Kung-t'an and the large yellow Sha Shih craft. There is a land route from Fu-shun to Lu Chou, at least as far as Fu Shih, 30 *li* above Lu Chou. The stages are Ch'in-shan Ting, 4 ; Ta-t'ou Chên, 30; Hwai-tê Chên, 30; and Fu Shih, 40 *li*, or about 180 *li* in all, some of the *li* being 'long.' I took the water route the whole way, in order to see the river. It is a fine stream of about the calibre of the Ho Chou River; the rapids are comparatively harmless, and the current moderate. The water is, according to the extremes of season, twelve feet higher and lower than when I passed down. The first rapid is Ch'ang-yau T'an, about half a mile below Fu-shun; then the river turns south at a rapid called Pan-pien Sz, about two miles lower. A little further down, on the right bank, is Tsên-chi K'ou, where the Tsz-liu Ching River enters this. Below the embouchure are a few Man-tsz Tung or aboriginal caves in the rocks on the right bank. The first village of any size is Hwang-hwa Hao on the left bank, thirty *li* by land from Fu-shun. Ten *li* further down is the rapid of Niu-p'i T'an; a little lower, that of San-mu T'an, with some rocks below; and then on the right bank the village and small unnavigable stream of Hwang-t'ien Ch'i. From this point downwards there are several places where abundance of coal is produced; it must be dirt cheap, for at Tsz-liu Ching it sells at two cash the catty, notwithstanding the difficult river carriage. Though there is no coal at

Tsz Chou or Niu-kiang, yet there is at Wei-yüan Hien, and also in some parts of Yung Hien; but, as there is no river available, this coal, though close by, is not imported into Kung Tsing or Nei-kiang. Fifteen *li* below Hwang-t'ien Ch'i is the rapid of Tsch-tui-tsz, the first, so far, which deserves the name at all; and a wreck below shews that it may be dangerous. P'i-p'a Ch'ang is a picturesque market town on the left bank, 90 *li* by water from Fu-shun. Shih-hwui Ch'i, on the right bank, is 130 *li* by water and 60 by land from the same city. Here the stream which joins our river is navigable for 25 *li*, but all cargo (chiefly coal) brought down has to be transhipped at the mouth, where the stream is kept from running into the Fu-shun River by a *yen* or weir similar to that at Têng-ching Kwan, opened, probably, when the Fu-shun River is at its highest. Lower down, at the rapid of Pê-ma Wei, there are gold washings on both banks of the river; and, lower still, a double-mouthed rapid called Shwang-kwan-tsz. Fifteen *li* below Shih-hwui, on the right bank, is the stronghold (*Chai-tsz*) of P'u-ngan Chai, with the rapid of Kwan-yin T'an. Half a mile lower down, also on the right bank, is the market-town of Chao-hwa Chên, which ranks as the first fair (*Ch'ang*) of Fu-shun District. A mile or two below this, there is a really serious rapid called Shih-kou-tsz, running at the rate of eight or ten knots; it is made a little dangerous by certain rocks called Lien-hwa Shih, lying in mid-stream half a mile lower down. The banks of the river are comparatively low so far, the hills, yellow and red sandstone, seldom exceeding 300 feet in height. In some places there are large and almost flat tracts where the area or bed of the river is very broad, with large banks or islands between its straggling channels. The scenery is picturesque, soft, and not in the least wild; some places are very like the Thames at Richmond or Kew, substituting vegetables and young crops of millet, sugar, etc., for grass; and bamboos, oranges, firs, banyans, willows, etc., for the well-known trees of the Thames. The water, at this time of the year at least, is muddy, but not quite so ochreous and oily looking as that of the Yang-tsz.

On the left bank, some little distance below Lien-hwa Shih, is a small stream, (perhaps the one we crossed near Li-shih Chên), not navigable for anything but sampans: and, near it, two very

picturesque looking strongholds called Wan-ch'üan Chai and Fu-t'ou Chai, both built within recent years at a time when Sz Ch'uan was overrun by rebels. We anchored for the first day at Hwai-tê Chên. Below this place the river becomes more tortuous, and the rapids more serious; but nothing we saw all the way down to this point would count as a third-class Yang-tsz rapid, not to mention those dreadful falls of the Kung-t'an River. But they grow worse when the water is low, and at all times give difficulty to the trackers, who are obliged to do a great deal of wading at shallow bends. I-ho Chên is the last town belonging to Fu-shun on the right bank; just below, is the chief rapid of the river appropriately called the 'Great Rapid' or Ta T'an; a creek on the right bank marks the boundary between Lu Chou and Fu-shun Hien. A little lower down, on the left bank, is Hsiang-p'i Ch'ang, belonging to Lu Chou. Opposite this place, I saw some fishing cormorants (*ta-yü niao* or *lao wa*), but did not witness their diving operations. They are said to come from the wild lands of Yün Nan and Kwei Chow, notably from the Wu-chiang River in the latter Province. There is a well-known place on the Sz Ch'uan and Yün Nan frontier called Lao-wa T'an, which perhaps may have some connection with the catching of these birds. A very awkward combination of rapid and rocks occurs at Yang-hung-ma-t'ah, below which the river sweeps south, and then west, to the rocky rapid of Tung T'an, where it again turns south-east. There were several wrecks below this rapid, and one junk which was ascending broke loose as we passed down. There are a number of very pretty water birds on this river, called *shui-koh-tsz* or 'water pigeons.' They are of a light dove colour, and in shape something between a thrush and a swallow. I should mention that I saw a kingfisher in the paddy fields near Lung-ch'ang. In none of the cities or market-towns did I see game of any sort exposed for sale, not even rabbits. A Chinaman seems to desire nothing fleshly beyond his pork. The vegetation continues the same all the way down the river, tobacco being amongst the most important of the young autumn crops. The hot spell of April, when the wheat, opium, peas, and beans are gathered in, gives the country the appearance of autumn, but the rains of May soon bring down the temperature, and the newly-planted millet, sugar, tobacco, etc.,

change the face of the country into spring once more. A considerable number of young *nan mu* trees (? *Laurus Szechuanensis*), had been recently planted on the bank near Tung T'an; it is largely used in ship-building for making pegs and stanchions. The next two rapids were Li-chih T'an, where there were more wrecks, and Niu-t'an Pa, both a mile or two above Fu-shih, opposite which town are three rapids in succession called Fu-shih San-t'an. Although they are somewhat formidable in appearance, yet upward junks seem to find sufficient water close to the bank, where the currents are less violent. The river which we crossed at Lung-ch'ang and Yung-ch'ang comes out here. Like most Chinese rivers it has innumerable local names: here it is called the Fu-shih River, and the Tung-tsz River. All the boatmen insist that it goes round by both Lung-chang and Yung-ch'ang and comes from the Niu-Kiang District, where it is called the Ch'ing-lung Ho. Navigation is entirely obstructed a few *li* above Fu-shih at Fu-tsz Ch'ang. The village of Lien-yü Tung on the right bank, fifteen *li* by land from Lu Chou, is remarkable for the entire absence of smoke-stacks, there being some superstition or tradition regarding fire which forbids their construction. At this point, I observed very extensive orange and lungan plantations, (*Nephelium longana*), on both banks, and also large tracts from which the poppy-stalks had not yet been plucked. On the left bank lower down, separated from the main stream by a bank or islet, is a very striking cataract rushing down the rocky bank at an angle of twenty degrees; it is as broad as a moderate-sized river, and in the distance I first mistook its foam for a bed of chalk; it goes by the name of Yü-chien T'an. Just below this, is a very prosperous tile factory. The Lung-tung Kwan now comes in sight on the right bank. This is a sort of stockade, resembling a city wall, built upon a hill commanding the western land approach to Lu Chou, and bearing much the same relation to that place that the Fu-t'u Kwan does to Ch'ung-k'ing. The high-road to Nan-k'i, (180 *li*), and Sui Fu, (300 *li*), passes through the portal of this stockade. The river now passes Lu Chou on the right hank, and runs east into the Yang-tsz, but the left bank continues straight on, in such a way that the Great River, coming from the south, has the appearance of being a tributary of the Fu-shun River. Lu Chou extends upwards a

couple of miles along the left bank of the Yang-tsz where innumerable salt and other junks are moored. The situation of Lu Chou, and the pagodas in the vicinity very much call to mind the site of its rival Ho Chou. Lu Chou is an independent Department, and 'governs' the Districts of Ho-kiang, Na-k'i, Kiang-an, and the 'Nine Tribes' near Sü-yung; it is the great centre of the Government Salt Trade, both the K'ien-wei and Fu-shun branches of which make this their *depôt*. The difference between an independent Department and a Prefecture appears to be that, besides governing fewer Districts, the former governs itself directly, and not through a *shou hien* or 'prefectural district,' like a Prefecture. There are twenty-one licentiates allotted, two out of every three years, to Lu Chou. The best inn was so filthy that I was glad to accept the hospitality of an amiable priest who has a house in the town. The tranquillity of a retired house is inexpressibly soothing after a few weeks of dirt and noise. If there were only a spot twelve feet square, no matter where, affording peace, light, and quietness after the buffetting of each day's travel, the natural beauties of Sz Ch'uan would amply compensate for the shortcomings of its inhabitants, but the ever-recurring prospect of a foul room in a fouler atmosphere, gradually makes one sicken at the very thought of approaching a town.

At Lu Chou my followers went into mourning to the extent of hauling down colours, that is, removing the red tassels from their hats. At Fu-shun we had already heard that a Dowager-Empress had 'ascended to a distance on phœnix-back,' but it seemed to be the opinion there that it was the Empress-Mother of the late Emperor; at Lu Chou, however, both Chinese and foreigner agreed that it was her Majesty the Empress Ts'z-an. The officials had unshorn pates, and wore white sackcloth robes, besides swathing their chairs in black. It will hardly be believed that there is a printed foreign newspaper in Sz Ch'uan; yet, for the second time, I was present when the 'French mail' arrived in the shape of a printed sheet about six inches by four, announcing amongst other things that the French had sent 9,000 troops to Tunis with a view of establishing their preponderance. This 'journal,' printed at Ch'ung-k'ing, has a circulation of about one hundred, and does great credit to the energetic editor.

Travellers who object to waiting a week or so in order to strike a bargain should be warned against trusting to boat conveyance down the river. As the journey down takes less than a quarter of the time occupied by the journey up, the boatmen charge for both ways, in order to recoup themselves in anticipation of not finding a job lower down. My boatman had come from the Capital, and had been bargaining for many days with a local official for a trip back, when I stepped in and took him down another 150 miles. Anyone who has a fair pretext for demanding official assistance can easily get a boat 'sealed to him' for next to nothing, (*fêng ch'uan*); but, under this system, he is passed on from District to District, and must repeat the operation at each city; besides, the *corvée* practice is very hard upon the boatmen, and not at all to the liking of most Europeans.

Leaving Lu Chou on a nice dull morning, we passed a squat five-storied pagoda on the right bank, near which the 'lower examination office,' in the shape of three large passenger-boats moored abreast, is established. Duties, *likin*, etc., are paid at the town or central Customs Station, and certificates are examined above or below the town, according to which way the junk is going. On the left bank are some extensive iron cooking-pan establishments; the iron for the manufacture of which comes from or *viâ* Yung-ning; so that it would appear Kiang-k'ou has not the entire monopoly of the trade. The territorial *taotai*, who resides at Lu Chou, and has jurisdiction over the Sü-chow Prefecture, the independent Departments of Tsz Chou and Lu Chou, and the two Sub-prefectures of Sü-yung and Lui-po, is called the Yung-ning *Tao*. As the District of Yung-ning is the sole one under the independent Sub-prefecture of Sü-yung, that part of the world would seem to be over-governed. The Kien-ch'ang *Tao*, who rules over the west and the south wedge of Sz Ch'uan, also resides at Ya-chou, away from his titular city. Below the pan factories, a good flight of steps from the river marks the commencement of the land route to Ch'ung-k'ing, which passes Li-shih Chan (90 *li*), and Yung-ch'uan, 90 more; or 180 *li* in all to the last-named city. The river now sweeps round to the east and we pass the rapid of Li T'an, which looks as if there were some unpleasant rocks beneath it. At this time of the year (middle of May) the water is

called *kao-t'ang*, and is about fifteen feet higher and lower than in the winter and summer seasons, respectively. Junks of all sizes and descriptions were passing up and down, some of them with as many as fifty trackers. Cotton from Ch'ung-k'ing, silk from Kia-ting, and drugs from various places seem to be amongst the chief articles of import and export; but Lu Chou is rather a distributing *depôt* than a trading mart. It used to be situated sixty *li* lower down the river; but, in consequence of a *kiao-tsz-ngan* or 'case of murder of a parent by his offspring,' it was (it is said) removed during the Ming Dynasty to its present site. We pass a number of Man-tsz Tung in the rocks or hills of the right bank, and then turn north to the triple rapid of Wa-yan San-t'an. The scenery is soft, peaceful, and green. No high hills are to be seen; the banks are cultivated to within a few feet of the water's edge, (which shews that the rise cannot, at any rate always, be very much higher); the hills are of red sandstone and covered with varied shrubs and wood; the air is sweet and balmy; the water soft, oily-looking, and muddy, but excellent and wholesome drinking.

The first village of any size that we pass is Hsin-lu K'ou, after which we come in sight of Lao (Old) Lu Chou. Vestiges of the old wall still remain, with the skeleton of a gate which must look very weird in the moonlight. The site is a commanding promontory round which the river veers to the east, the current carrying the boats far away round to the other side of the river, as though nature wished them to avoid a spot where so horrid a deed had been committed. A great deal of fuss is made in China over these parricidal cases. In theory, no matter how little fault attaches to the parricide, he is sliced in pieces, the town must change either its site or its name, if not both, and even, I believe, its status. A case of this sort is now going on at Kiang-tsing; but the townsmen, besides being anxious to escape ruin, know perfectly well that it is a trumped-up case, and have managed to get the original verdict set aside. Readers of the *Peking Gazette* will have observed that, in such cases, the homicide is almost invariably reported to be a lunatic; for this fact, though of no service to the criminal, frees the town, the relatives, and other persons incriminated by law, of vicarious responsibility.

There are a number of young *nan mu* striplings planted about here; their long, straight, slim, and bare trunks do not look as if they could ever develop into the oak or sycamore-like monsters which I saw in Kwei Chow. At the bend opposite Old Lu Chou is the market-town of Pi-t'ung Ngai, twenty *li* below which is the limit between Lu Chou Department, and its dependency Ho-kiang Hien District. A four-storied pagoda, something like that opposite Lu Chou, stands on the lower end of the Old Lu Chou promontory or spit; and, on the opposite side, cut large in the rock near which descending boats are carried, is an inscription evolved by one of the *taotais* of Lu Chou, half a century ago. It runs, 'For the aid and benefit of all living creatures,' and probably alludes to the breakwater influence of the rock. The bed of the river must be very broad in summer time, for the rocks within the catchment area to the right standing ten and twenty feet out of the water, are just covered at the flood, and form most dangerous rapids and whirls. Lower down, near the left bank, some rocks, of probably a similar nature, are just covered, and form a dangerous whirlpool called Niu-lau Yih. It is hard to see what escape there could be for a junk landed in a hole between high rocks from which the water must escape either backwards or sideways. There were similar sinks or traps at the first of the Wa-yau San-t'an, and to our left the current at the rapid was rushing up-stream. A large junk, just ahead of us, which had descended too much sideways, had to row for its life to keep its stern clear of the whirl; but we glided straight down quite close to it. The town opposite the whirlpool of Niu-lau Yih on the left bank is called by the same name; it is also called Shang-pê Sha, and beyond it the river turns east. After a little while, it again turns south, and even south-west, passing on the right a jagged hill about 2,000 feet high, the first of any importance we have seen since leaving Lu Chou. A considerable town at the corner a few miles further down is Ho-kiang Hien, noted for its lichees, (*Nephelium lichi*), the lowest-lying town I have yet seen on the Great River's banks; but perhaps in the winter season it wears a different aspect. I could not anywhere see the city wall, which was hidden by the suburb. The place cannot contain more than 10,000 inhabitants, if so many. The city walls of Sz Ch'uan

towns are very different from the broad and solid masses one sees in the northern and eastern Provinces. They are seldom more than five or six feet thick, and indeed are often mere stockades or bolsterings-up of patches between the rocks or mounds on which the town is built. Ho-kiang is 130 *li* from Lu Chou by land, and probably 150 or more by water. The river which comes from Jên-hwai in Kwei Chou Province runs from the south-west into the Great River just below the town. Like nearly all Sz Ch'uan rivers, it abounds in rapids; but I hope some time to be able to speak from personal observation. The Kwei Chou frontier is said to be about 120 *li* from the Great River, and, before reaching the latter, the Jên-hwai River winds nine times about or near a mountain called Ting Shan, to which 'obeisance is made,' (*pai*) *i.e.* the boat is directed, nine times during her trip up or down. Salt is the chief upward cargo, and 'mountain produce,' such as grain, bamboo shoots, drugs, pulse, and a species of astringent taro* called *mo yü* come down. Jên-hwai Hien must not be confused with the Sub-prefecture or T'ing of the same name.

The Yang-tsz now turns north-east, and we pass a pagoda, at the corner on the left bank, which is visible from far below Ho-kiang. Lower down, a rock runs out from the right bank into the middle of the river, and just above it is the whirlpool of Ch'ien K'ou. To the right are a few hills, perhaps 2,500 feet high, which we lose sight of as we turn north and pass Wang-chia Ch'ang on the right bank, a *kai-tsz*, or village mart, subject to Ho-kiang, and celebrated for its olives (*ch'ing kwo*, or *Canarium album*). A mile below this, a creek crossed by a bridge of straight stone blocks runs over an irregular mass of red sandstone rocks into the Yang-tsz. It also comes from Kwei Chou, but of course is not navigable; its waters rise on the opposite side of the ridge which forms the source of the K'i-kiang River† or of a branch of it, and consequently the two always rise at the

* Also called *Kwei-tou-fu*, or 'ghosts' bean-curd.' Raw, it is used medicinally for sores. Ground, and boiled with lime, it takes the place of flour and bean-curd as a comestible.

† The maps appear to be all untrustworthy as regards rivers, and hence I note, to the best of my endeavours, their actual courses. I should mention, however, that, shortly after leaving K'i-kiang, I failed (as elsewhere stated) to discover the embouchure of a river which is evidently the one now referred to.

same time. We now turn north-west, and come in sight of a raised house amid a clump of trees, on the right bank, opposite the village of Shih-pa T'o, (Kiang-tsing District). Sz Ch'uan has never produced a *chwang-yüan* or *optimus* at the Peking examinations since one Yang obtained the honour about a century ago; at least so the story goes. He stood high in the Emperor's favour, but was particularly anxious to re-visit his 'three agnates and five affinities'—in other words his friends—once more. The Emperor would not part with him, although he pleaded very hard. At last he said that it was his duty to attend to certain tribute due from his native Province,—certain enormous brooms six feet broad. 'But how do you manipulate such big brooms?' asked his Majesty. 'Thus, with two hands,' said Yang, imitating the movement by gestures. I do not quite see the point of the joke, or the insult; but, anyhow, the Emperor did, and he was ired, and sentenced Yang to perpetual exile. 'As your Majesty willeth; only anywhere but Shih-pa T'o in Sz Ch'uan, a filthy place which would suffocate me to death,' prayed the disgraced official. 'However, to Shih-pa T'o you shall go, and nowhere else,' rejoined the monarch in his royal rage: and exiled he was, to the bosom of his family.

We now turn north-west and then north until we reach Yang-shih P'an on the right bank, and here we moored, being overtaken by a storm. It is well I ran no risks with an open boat this time, for even with a *kwa tsz chuan*, or large passenger boat, my things got wet.

Leaving Yang-shih P'an, we take the left channel of a broad catchment space resembling that opposite Lu Chou, the right channel turning north-west and ours south-west. The two channels join on the other side of the island and run north-east. To the right is a picturesque hill, prettily wooded, called Sien-yü Shan, opposite to which on the left bank is Chu-chia T'o, a market town of some size, belonging to Yung-ch'uan Hien, and once the scene of the usurper Li Chin-wang's exploits. At this place a boat puts out, and we supply ourselves with garlic, a species of onion or scallion called the *k'u hiai*, beans, chillies, and other luxuries. The size of the *tan*, *tou*, *shêng*, and *koh*, (which at Ch'ung K'ing may be roughly compared with the double-bushel,

peck, quart, and gill), varies very much at different places. Here half a *shêng* of broad beans, at least a quart, sold for 20 cash, or less than a penny. We pass some rocks to the left, and, continuing north-east, come in view of Kwan Ch'i on the right bank; at this place a small river runs into the Yang-tsz from Shih-êrh Tu on the Kwei Chou frontier,* and brings down thence cargoes of sulphur and saltpetre. The banks to within two feet of the water are covered with tobacco planted in the tenth month. If it ripens before the rising water reaches it, it is manufactured into *han-yen* or the ordinary leaf tobacco, which the Sz Ch'uan people usually stick into their pipes in the form of a rough cigar like a *Veevy fin* cut in two. If it has to be cut unripe, it is chopped into the *sz-yen*, or 'silky tobacco,' smoked in the water-pipes. The tobacco, which is planted in the third and fourth moons, is gathered in the fifth and sixth. Passing near the dangerous rapid of Lau-ying T'an on the right bank, where many junks are said to come to grief, and near which there is a stone tablet with characters writ large which I could not make out, we turn north and arrive off the market-town of Sung-ch'i, on the left bank. Though you do not see very much of it from the river, it is said to extend back in a continuous street three miles or more in length. Two streams enter the Great River just above this place, the first of which is said to come from Yung-ch'uan city and Shwang-lung Ch'ang, and the second from Ch'ên-shih Ch'ang; another stream, from Hsin-lung Ch'ang, enters the Great River immediately below the town. I give the information as collected by me; but it will not be easy to reconcile these *data* with those already given, as we travelled by land in a westerly direction. I am inclined to think that the river below the town must be the Yung-ch'uan River, and the other two those crossed at T'ai-p'ing and Shwang-shih or Hiang-shui Tan. You can be certain of nothing in China unless you actually see it. No native who has not actually travelled over the land can tell you much about a road or a river, and if he does, (assuming that he attempts to tell the truth), it is not always that he can keep up the resolution, or that he does not go afield for some reason for distorting it. He

* Some maps bring the Kwei Chou frontier up to the Great River, but this is quite a mistake.

first thinks what it is his interest to say, then what you would like him to say, then what it is becoming to say, and finally what people generally say; or he says what his ready tongue happens to have on the end of it. Notwithstanding all this, no Chinaman of any rank or station fails to ascertain the exact truth when his own pocket is concerned.

Sung-ch'i is computed to be 120 *li* from Ho-kiang. A few miles further down on the left bank is the market-town of Fu-hsin Ch'ang, where the river which we crossed at Ma-fang Ch'iao enters the Yang-tsz. Beyond this, the left bank belongs to Kiang-tsing District.

We next pass the village of Erh-ch'i Ch'ang on the right bank, and a very large and beautiful plantation of yews, with bamboos in the middle, surrounding a handsome residence on the left bank. There are some rocks to the right, after which we turn north and pass the mouth of a second small stream (hence the name Erh-ch'i) coming from the south, and, like the one at Kwan Ch'i, from Shih-êrh Tu. Turning north-east, we pass Shih-mên-'rh on the left bank, below which the stream which we crossed at Ting-chiang Ngao enters the Yang-tsz. It communicates with a place called Ch'ang-ch'ung, but is not navigable. Opposite Shih-mên-'rh a number of bamboo rafts, loaded with huge jars of wine, are making their way up to Ya-chou Fu. This wine comes from Pê-sha, a place we can see ahead of us on the right bank, and which is supposed to be 70 *li* from Sung-ch'i. All this way down, the Great River, at this stage of the water, is a magnificent broad stream, in which it is hardly ever necessary to actually descend the rapids, most of which are near the banks. The scenery continues to be hilly, but not mountainous; and no uncultivated land is visible in any direction. At Pê-sha there are a number of Ya-chou rafts, which go crawling up in lengths of sometimes 500 feet, with a boat for steering at intervals of every hundred feet or so; they are very narrow, and just broad enough for a matshed to be built upon them as shelter. There is a very fine and conspicuous guild here, built in red, marked (unless my eyes deceive me) *San Ch'u Hwui-kwan*, which would mean 'Hu Kwang Club.' There were not more than a score of junks opposite the town, which would probably contain 10,000 inhabitants. The river

now turns north. At various large places boats have shot out with 'protectors' on board, in readiness to escort some native official from stage to stage. Their solicitude is damped when they see it is only a forbidding-looking man of the ocean. They seem to think it quite natural that they should have to hang about for another day or two: of all commodities in this country time is undoubtedly the cheapest.

Both banks of the River, especially the right bank, are much lower about here than I have ever seen them for any great expanse west of Ich'ang. The next reach runs north-east, then the river turns once more north, and always in a fine broad rich stream such as the *Great Eastern* could easily turn in. I do not think that anywhere between Lu Chou and this the bed has been less than a quarter of a mile broad, though the channel is occasionally narrowed (as far as would concern steamer navigation), by rapids and rocks. Our course is now north-west, and we pass, on the left, a creek spanned by a long bridge of stepping-stones; immediately below this is the market-town of Yu-ch'i, built to a great extent upon piles supported by holes in the rocks. At the lower end of the town, the stream which we crossed at Lai-fêng Yih enters the Yang-tsz, which now turns north-east. Both Sung-ch'i and Yu-ch'i are ninety *li* from their District City Yung-ch'uan. The country now becomes a little more hilly, the left bank being perhaps 700 feet above the River. We turn east, and pass Kau-hwo Ch'ang, with a stream below which runs from Tsou-ma Kang, the end of our first day's journey westward. Not one of the rivers on the left bank between Lu Chou and Ch'ung-k'ing is navigable for any but small boats. Further down, we pass on our right the compact town and the rapid of Lung-mên T'an, the eddy below which meets the descending rapid as it rolls over a rock, and forms what must be a fatal vortex for any boat getting into it. A stream entering the Great River at this place runs from Lo-p'ing Ch'ang under the Kiang-tsing District. Both sides of the river are now decidedly hilly, but highly cultivated, and thickly planted with orange trees. The river turns north at Lung-mên, and then east to a bend, just before which, near the left bank, is a huge rock called Tiger Rock, which has tumbled down from the hill-top, and which has some legend attached to it. The characters, *Hu*

Shih, 'Tiger Rock,' are cut upon its face in large and easily visible characters. There is also a lengthy inscription, too small to be deciphered at a distance. Opposite this rock is a fine new house built by a man who has made his fortune out of oranges; and, as the river sweeps round to the north-west, we get a fine view of his magnificent orange-groves, covering the whole of the right-hand slopes for several miles. We are now running diagonally towards a long range which runs from north to south on the left side of the River, and which I think must be a continuation of that range which we skirted just before emerging from the K'i-kiang River; but as we are rapidly approaching Kiang-tsing, (only forty *li* from Kiang K'ou), we shall soon see. The right bank lowers as the river bends to the north, and we get a fine view of the Kiang-tsing pagoda occupying a commanding site on the top of a wooded hill, not unlike the island at Pagoda Anchorage, Foochow. On the left bank, just at the bend, is a dirty-looking village called Pê-kan Pa, which looks as if it had a strong wall around it, as the bare mud banks descend perpendicularly from the houses to the river-side. We are now in full view of the city on the right, with a village opposite called Chung-tu Kai. Kiang-tsing, (Blakiston's Kiang-tsze), is built low, like Ho-kiang, not being more than 50 or 60 feet above the water. The boatmen all say that the river is never more than four feet lower than at present, but that all the houses outside the city are occasionally flooded at highest water. Besides the fine pagoda on the hill of the left bank, there is an equally fine one, behind the city, on the right bank, but just visible above the houses. The interior part of the town looks neat and very well built, but the extra-mural portion has only a rough and temporary look, as if not intended for permanence. The *yamên*, built under the wall near the river, looks quite a handsome place, and very different from the ricketty masses of haggarts usually inhabited by Chinese mandarins. Both pagodas are of thirteen storeys, that is, thirteen apartments, each surmounted by a projecting ridge running round the top, with a crest running inwards and upwards from the topmost ridge. It is true that most Chinese pagodas have an odd number of ridges; but the arrangement of base and crest does not always give the same number of actual stages. And I have seen several pagodas with an even number of

both stages and ridges, however you count them. It is one of the most difficult things to count the number of stages in a Chinese pagoda from a distance, for the eye has no point of rest by which it can stop and begin afresh.

The river turns almost due south after passing Kiang-tsing, then west, then west-north-west, until we get a fine view of both Kiang-k'ou and Kiang-tsing, together. It is evident that the range running along the right bank of the K'i-kiang River, and which we, coming from the west, are now by way of bisecting at right angles, cannot be the range, or a continuation of the range, of which I just spoke, for then the north was to our right, whereas the Kiang K'ou range also running north and south has its north end to our left.

I have already on a previous occasion described the Great River from Kiang K'ou down to Ch'ung-k'ing. I will only add that, on this occasion, I went on shore at Pē-sha (Lime-stone Pass), in order to visit the coal mines and the lime kilns. I went a few yards down one pit, until stopped by the wet; it was shored up internally with beams, and sloped down exactly like the mines near Peking. Every mine has an air shaft, and without this the small *t'ung* oil lamp which each workman fastens round his head cannot be burnt. The Chinese say that there is no danger from fire-damp as long as there is air for the lamp. They seem quite ignorant of the Davy principle, which, indeed, is not to be wondered at, seeing that we ourselves have only known it a few years. The mine produced dusty, smoky coal, which sold at the pit mouth for 70 cash the *tou* of about 200 catties. Thus the *tou* (for this special purpose) is twice the size of a *tan*, (in its ordinary sense of 100 catties), of which, however, it is always in theory but the tenth part. The lime-kiln produced over 100 catties of lime a day, and sold it at 7,000 cash the 10,000 catties, burning three *tou*, or say 200 cash worth, of coal daily, *i.e.* in producing 700 cash worth of lime. The export of the stone was forbidden, but anyone could come and burn lime on the spot. I gathered a number of new plants on the hills, the botanical names for some of which are given in a separate list.

NORTH KWEI CHOU.

One of the great Ch'ung-k'ing high-roads runs from Hai-t'ang Ch'i on the right bank of the Yang-tsz to T'ung-tsz Hien in the Province of Kwei Chou. Having undergone a second saturation of Ch'ung-k'ing smells, I yielded to the intense desire for a little fresh air, and started on an expedition along this road. Travelling by land in Sz Ch'uan is expensive work, unless one is prepared to deny himself every vestige of comfort and cleanliness. Strong chair-coolies sufficiently robust to endure the mountain roads cannot be hired for less than 300 cash a day. Servants cannot be dispensed with, and they too require small chairs, so that 4000 cash a day for coolies is only a preliminary expense. Accordingly, our party went trooping along to the number of seventeen, all told, and, after ascending the imposing hills opposite Ch'ung-k'ing, found ourselves at a village called Lao Chün Tung, five *li* from the landing-place at the foot of the village of Hai-t'ang Ch'i. The Kwei Chou road crosses this ridge a little to the left of a very prominent pagoda which crowns the summit of one of the hills opposite Ch'ung-k'ing. The fog or mist, in which Sz Ch'uan seems to be chronically enveloped at this season of the year, lifted just as we turned to take a parting look at the river, and enabled us to get a good view of the picturesque but odiously dirty city. I am told by travellers who have journeyed from Yün Nan by way of Chao-t'ung Fu, that fogs hang like a permanent dividing-line upon the edge of the Sz Ch'uan highlands, and, indeed, that this mist gives the name to Yün Nan, which simply means 'South of the Clouds.'

We met enormous numbers of coolies conveying rice to Ch'ung-k'ing. It is carried in canvas bags, each containing a *tou* of 40 catties, and one of which is slung at each end of the carrying pole. The price in the country is 600 cash a *tou*, and 700 at Ch'ung-k'ing. The rice was being conveyed from the village at which a market (*ch'ang*) happened to have been held that day, and to which the surrounding countrymen convey their produce. These markets are quite an institution of Sz Ch'uan, and are usually held on fixed days in each month; as, for instance, on all days having a 3, 5, or 8 in them. I surmise that what the Cantonese call a *höü* or *hü* must be the same thing; but I have never visited one of the latter. The

expression *kon höü* or *kan ch'ang* would therefore mean 'going to the fair.'

Crossing the ridge of hills, the road takes a course almost due south along the upper side of a valley the bottom of which is paddy land, and the slopes of which are covered with the poppy. This was my first experience of the poppy in large quantities, and, in truth, it appeared as if all cultivation had been abandoned in its favour. Hill-sides, paddy-land, ridges, rocks,—every spot seemed covered with it. Of the dozen or so of square miles which the eye could command, eleven must have been given up to poppy cultivation. Wheat and broad beans (*ts'an*, or *fa*, or *ha tou*) were the only other considerable crops, except on the roughest hills, where peas (or *wan tou*) seemed to flourish best. An intelligent gentleman informed me that a piece or bed of land (*t'ang*) about 15 feet square would produce from six to eight quarts (*shêng*) of wheat, worth from 60 to 70 cash the quart; whilst the same land would produce ten ounces of well-settled opium, worth 160 cash the ounce. Thus grain does not fetch one third the money that the same area of opium does; but it should be remembered that the poppy requires more skill, and plenty of manure. In this valley we passed an opium shop, where I noticed an advertisement to the effect that a 'big box' of Yün Nan opium was 24 cash, and a 'small box' 18 cash. I was told that a big box contained $\frac{1}{10}$ of an ounce, and a small box $\frac{1}{15}$; so that the price of the prepared drug was about 250 cash the ounce. It is five *li* from Lao-chün Tung to Ma-chia Tien, near which place I observed a number of coolies conveying coal to Ch'ung-k'ing. I could see mines on the sides of the hills in the distance. The coal was nearly all dusty, and looked dirty, and likely to smoke much. The local price was 90 cash the *t'o*, or 60 cash the *t'iao*, one *t'iao* or load being a third of two *t'o*. The *t'o* appears to be the unit of measurement at the pit's mouth. The coolies said the selling price at Ch'ung-k'ing was just double.

What has struck me most in Sz Ch'uan is the shabby and abject look of the people compared with the richness of the land. Who enjoys all these rich crops?

Lau Ch'ang is a considerable village, and a flourishing opium centre, fifteen *li* from Lao-chün Tung, and looks like a collection of shambles. Here I noticed a few loads of iron in small pigs, and

was told that it came from a place over 100 *li* farther on, called Chieh-lung Ch'ang. A load of 100 catties (the bystanders said) costs 3,000 cash at the place of production, and sells for 5,000 cash at Ch'ung-k'ing. Some men also passed me carrying on their backs huge bales of what looked at first like cotton, and then like snow-white sugar-sticks, or manna. This turned out to be *t'ung ts'ao*, or *Fatsia papyrifera*, from Sung-k'an near the Kwei Chou frontier. The sticks are so light that they blow away from the hand, and a bale only weighs 20 catties. A villager volunteered the information that it cost 300 to 400 cash the catty at Sung-k'an, and sold for 600 to 700 at Ch'ung-k'ing. He said the chief use of it was to make artificial flowers for women's hair; but those beautiful pictures on snow-white 'paper,' which one buys at Canton, are also made of this material. Another strange commodity which passed us was pig's bristles, for sale as manure.

Seven and a half *li* from Lau Ch'ang is another market town called San-pê T'i, where a man pointed out a grove of pine trees which he said were specially destined for providing props for the coal mines. Near this place, too, I observed what I suppose were cherry trees, (*ch'ing t'ao*, or *ying t'ao*), bursting into flower. The description given of the fruit corresponded with the appearance of a cherry, and the gardener added that the season only lasted ten days.

We tiffined at a miserable hostelry called Lau-a Shu, so ill-provided that even a couple of eggs were procured with difficulty. Another twelve *li* brought us to K'ai-shih Ch'ang, the first stage on the way from Ch'ung-k'ing to Kwei Chou. According to the landlord, it was 60 *li* from Ch'ung-k'ing, 50 from Lau-chün Tung, and 34 from San-pê T'i. In the other direction, Pê-kwo Shu was 54, and Chieh-lung Ch'ang 74 *li*. During the last 20 *li*, wheat and beans were more plentiful, although the poppy still occupied a good half of the land.

The miseries of hotel life in China, and especially in the south, have been enlarged upon so often that I need not advert at length to my experiences in this regard. Suffice it to say that the Chinese waiters do everything which is disgusting to the fastidious European. They blow down the spouts of tea-pots; wipe their noses on their sleeves; wipe cups (when they wipe them at all) with their

coat-tails or 'the hotel rag;' wash their hands in the saucepan; wipe the table with their hats or their skirts; put their filthy fingers in cups or on the inner side of plates; spit on the floor; scratch themselves with your knives; prize things open with your forks; pour wine back into bottles after it has been tasted;—in short, everything which we are so anxious that our servants should not do. In addition to this, the rooms are greasy and filthy; the divisions are thin; the noise is great; provisions are bad and scarce; cess-pools are usually placed outside the windows; lights are insufficient; draughts are ubiquitous; and, to crown all, vermin of every description swarm in every possible place. There is one good point about Sz Ch'uan, however, and that is that the people are generally too timorous to make their curiosity disagreeable.

I took a walk through the two main streets of Kai-shih, one of which leads to Nan-ch'uan *Hien*, and the other to K'i-kiang *Hien*. I noticed that the annual proclamation about the land-tax was already posted, although it had only just appeared when I left Ch'ung-k'ing. It states that, in addition to the *chêng liang*, or regular land-tax, an extra tax, (*ching-t'ieh*), of as much again will be required this year. The landlord told me that, in addition to this, there were other forced contributions, which would amount to six times the ordinary land-tax, *i.e.* to about Tls. 4,000,000 for the whole Province.

Next morning we continued our journey in a southerly direction to Nan-t'an K'iao, where we crossed a very fine bridge of three arches, out of all proportion to the four-foot road and tumble-down hamlet. It has been pointed out by other travellers that the bridges of this Province are exceptionally good; and, indeed, the veriest puddle of a creek seems to be a sufficient excuse for the erection of a handsome stone bridge. At the entrance to many villages are stone tablets containing warnings and exhortations to the young, or inscribed (by imperial permission) with eulogistic remarks upon the virtue of some widow or other. Virtue ought to be very austere in eastern Sz Ch'uan as far as males are concerned, for a sorrier collection of peasant women I never saw in my life. They wabble about like so many goats (without their grace or alacrity) on their miserably-deformed stumps. They are, however, usually neat about the head-dress, not to say gaudy, and doubtless

make wives quite good enough for their rustic husbands. They are not so ridiculously coy as their sisters of the east, and will sometimes even volunteer an observation to the savage of Europe.

We met a number of labourers carrying unhusked rice (*ku-tsz*) to Kai-shih. From their account, they carried three *tou* in their loads of 90 catties a *tou*. The best husked rice weighs 40 catties a *tou*, and is sold in the country by the catty, and in the town by the peck measure, or *tou*. Among the instruments which the Sz Ch'uanese use for husking rice is one called a *lui*, which appears to be a sort of light bamboo mill worked with the hand; but I have not yet succeeded in completely understanding it.

Five *li* further on is the hamlet of Pau-san K'iao, where a very substantial and comely little bridge, consisting of two huge slabs of stone resting on the banks, and on a pier in the middle, had just been constructed over a creek. A monolith hard by had also been erected to commemorate the deed, but the superscription had not yet been cut. Sexagonal monoliths, crowned with a sort of cocked-hat capital, are another embellishment common to the entrances to Sz Ch'uan villages. The main roads are always of stone slabs, four to six feet broad. The profits arising from the rich crops are thus partly invested in solid public works, (for of course such works are purely municipal, and quite unconnected with the executive government), which, at least, form one class of property that cannot be conveniently squeezed away. One *li* farther on we saw the quarry whence the stone had been taken. With no other instruments than a heavy iron chisel or wedge, and a rough sledge-hammer, the villagers cut out of the solid rock blocks twelve feet by four and one.

From the time we left Kai-shih, we saw very little of the poppy. Indeed I do not think I saw twenty beds of it during the whole day's journey to Lung-kang. I asked the reason, and was told vaguely that there was plenty of it farther on. The only large trees were the *hwang-kwo shu*, a tree which looks to me like a banyan, and which is very common from K'wei-chow Fu upwards. We passed one magnificent specimen, at least twelve feet in diameter, or thirty counting the ramifications of the exposed roots. The country was more wooded than nearer to Ch'ung-k'ing, the chief trees (most of them small or young) being cypress, (*pé*), and fir

or pine (*sung* or *ts'ung*), with occasional *Aleurites vernicia* (*t'ung*), peach trees, and cherries. In this neighbourhood I saw for the first time Sz Ch'uan tea. It was one single patch, growing amongst wheat upon a convex piece of ground. I was told it was a fine kind called *hao-mao-chien* (a sort of Pekoe, *i.e. pê hao* or *păk hou*), worth over 1000 cash a catty. As a rule tea is not procurable in the country inns.

Kung-p'ing Ch'ang, where the high-road (as seems in these parts to be usually the case) runs through the inn, is 15 *li* from Kai-shih, and a little farther on is Chi-wo Ching, where I had breakfast. I find that the total bill last night for a three-bedded room for myself and another three-bedded one for three servants, including hot water for my tea, and dinner for the three, was 240 cash, or barely one shilling. The identical 'religious Wang-êrh,' as Captain Gill calls him, is one of the servants, and another is the brother of the Chang-êrh who followed that able traveller. He bears the same name as his brother, although he is the eldest, and explains the circumstance by saying that it would not be modest to say Chang Ta, or 'eldest,' and so he is 'second brother No. 1,' and the other 'second No. 2,' a piece of reasoning not very conclusive to the European mind. Wang-êrh developed a habit of opium-smoking after leaving his enterprising master, and it may be interesting for those who doubt the possibility of curing the habit forthwith, to know that he broke it off completely in ten days. He first tried without medicine, and nearly died of dysentery, but was suddenly brought round with a quart of vinegar, salt, and water administered in large spoonfuls every half hour. The medicine which finally cured him was a powder bearing the Chinese name of Watson and Company.

Beyond Chi-wo Ching we met numbers of men carrying loads of bamboo-paper (*ts'ao chih*), a fabric the manufacture of which I have already described elsewhere. The load consisted of four packages (*k'un*) each weighing 16 catties, the price was 500 cash the packet. A packet contains 50 *ho*, or quires, of 78 sheets, *i.e.* 3,900 sheets. Some of it was white, some yellow, and a little further on we came to some pits where bamboo stalks destined for the manufacture were rotting in lime.

Chiang-chia P'ing is 5 *li* from Chi-wo, and at the top of a

ridge, the descent from which discloses a beautiful amphitheatre of cultivation. Amphitheatre is the word for the scenery of Eastern Sz Ch'uan. You surmount a ridge, and looking down, see perhaps six square miles of hills and valley, the arena being paddy, with innumerable twining and twisting dykes; the lower seats being a mixture of paddy-land and cabbages, and the top parapet being hills from 500 to 2000 feet high, with their pine forests and wheat slopes between. If, instead of being cut up into ridges and water, the hills were smoothed over and covered with grass, the country would resemble that part of Westmoreland through which the L. & N. W. Railway runs.

We met a man carrying a leopard skin, which he called 'tiger.' He said they were common in Kwei Chou, and that the peasants caught them by leaving poisoned dogs and fowls where they were likely to come. Fish are very often caught in Sz Ch'uan by poison: amongst other things the *pa-tou* (*Semina Crotonis tiglii*) are used for the purpose.

Higher hills than usual now loomed from the south, and I was told that these were in the vicinity of Lung-kang, our second day's stage. Our course now began to diverge a trifle from due south, and became a little westerly. Twelve *li* from Chi-wo is Pê-yang Miao; a little further on Shih-hwo Pa, 35 *li* from Kai-shih. Here I saw some *Olea fragrans* (*kwei-hwa shu*) and loose-skinned orange-trees (*Citrus margarita*); but of course devoid of fruit at this time. Kiang-tsing Hien is the famous place for oranges, and nearly all those I have as yet seen in Sz Ch'uan are of the loose-skinned kind (*kan-tsz*) like those of Foochow. Ten *li* farther on, we passed through the inn at Yen-p'ao-'rh, where I saw a man carrying a load of liquorice-root. I cut off and chewed a piece, which tasted precisely like that sold in our chemists' shops. The price was 120 cash the catty, or about five-pence the pound.

We now began a considerable ascent through pines and cypresses, and saw far away to the east two peaks close together called Shên-tu Shan, which I think must be near Nan-ch'uan. I enquired, and was told that Nan-ch'uan was on the other side; and when I visit that place I hope to identify them. Also to the east, but south of Shên-tu, was visible another prominent mountain which the coolies called T'ien-t'ai Sz,—probably from the name of

some temple thereon. I think Lung Kang must be at least 2000 feet above Ch'ung-k'ing, and that the two mountains mentioned must be as much higher than Lung-kang; but I took no barometrical observations. T'ien-t'ai looked 12 miles away, and the bearers called it 180 *li* (60 miles). This agrees both with the Jesuit maps, (which make Nan-ch'uan quite close to K'i-kiang 'as the crow flies'), and with Chinese calculations of 'aggravated' distance, which, between these two cities, is counted as 180 or 200 *li*, owing to the difficulties of the route. During our ascent I observed a box-like plant which was called by the peasants *hung-tsz* 'red berry,' and a tree like a willow called the *chüan-tsz shu*, from the fruit of which lamp-oil and candles are made. The price of the oil, according to one chair-bearer, was 20 cash at Ch'ung-k'ing; but a peasant derided the observation, and said that it was 60 cash in the country. The cost of this oil must therefore be considered as a suspended question. I have no idea what the *Hung-tsz* can be. Another name for it is the *chin-ping-liang*, from traditions that besieged armies in Yün Nan and Kan Suh have kept themselves from starving by devouring the berries. Usually they are given to the pigs, but the poor occasionally grind them up to be mixed with other flour.

Lung-kang Ch'ang is a market-town situated between two long mounds, which clasp it like the handle does the blade of a pocket-knife. I mounted the hill on the east side, and found that from the summit could be formed a very just idea of the surrounding country. Due south I noticed two spire-like peaks having the appearance of a cathedral. This I was told was called 'Double Hill,' which was in the K'i-kiang District, and 70 *li* distant from us. Due east, again, were the less remarkable but more conspicuous pair of peaks (already mentioned) called Shên-tu, and which I could now see formed one range with T'ien-t'ai. A peasant pointed a little to the south of this latter hill as the position of Nan-ch'uan. Strange to say, there was also a prominent landmark due west in the shape of a peak distant a couple of miles from the village. Lung-kang is 25 *li* from Shih-hwo Pa, and 60 from Kai-shih. Here also I remarked the land-tax proclamation issued by the Treasurer of the Province. The regular land-tax is Tls. 368,000. The two Districts of Wên-ch'uan and Tsz-t'ung,

on account of their poverty, are relieved from contributing the *ching-t'ieh*, and certain lands called *ping t'ien* and *kung t'ien*, (military and common tenures), are relieved also; so that the total yield from the *ching-t'ieh* source is only Tls. 500,000. According to the proclamation, Tls. 230,000 go to the support of the Tartars at Peking, and Tls. 150,000 to the maintenance of the Tartar and Chinese armies of the Province.

Our road the next day lay for the first few miles along the back of a long and narrow ridge between two valleys. To gain this ridge, the highway on leaving Lung-kang takes a turn to the east, but soon resumes its southerly direction. During the whole day's journey of 70 *li*, although I looked industriously in every direction, I did not see a single poppy until we were within a *li* or two of K'i-kiang, when I saw two small beds with one solitary poppy in full crimson flower. After 12 *li* of the ridge we came to the hamlet of Wo-shih Kang; and from that place to the boundary between the Pa and K'i-kiang Districts hardly met a soul on the road, nor passed anything deserving the name even of a hamlet. The road wound about between paddy slopes, which had been industriously laid out in layers, and interminable beds of wheat, beans, cabbages, and peas. I have never yet seen a field in Sz Ch'uan of more than 100 yards square; everything is in patches. The dividing line between the two Districts is marked by two large slabs, lying north and south of each other, (the one marked 'southern limit of Pa District,' and the other 'northern limit of K'i-kiang District,) just as you reach the end of a ridge. As one looks down, an oblong amphitheatre of paddy, vegetables, firs, bamboos, the silkworm oak,—a sort of *Quercus* (*ch'ing kang*),—discloses itself to the view; and this we descend and bisect in its longer diameter. The inn or hamlet at the boundary ridge is called Fei Shun. At the lower end of the amphitheatre is a rather remarkable pool under a vertical slab of rock, which at once strikes the eye as being a likely object for Chinese geomancy to practise upon. And, sure enough, a stone shrine is built on an eminence opposite, and the pool is called *fang shêng tang*, or 'animal life conserver.' At Hao Fang, 40 *li* from Lung-kang, I met some intelligent literates in the inn, and found them shy, but evidently pleased to enter into conversation. The Chinese would be a

charming people in spite of their venal vices, if they were always on their best behaviour. They can generally, even when maliciously disposed, be induced to keep up a decent demeanour before a defenceless stranger. To say that they are almost destitute of chivalrous feeling, and that they are not to be given too much *licence*, either in freedom or in money, is perhaps not unjust to the Chinese of all classes.

We lost sight of Shwang Shan after leaving the Lung-kang ridge; but a glimpse at it from the southern end of that ridge sufficed to show that one peak was partly made up of an enormous tree. At Sha-ho-tsz, 15 *li* from K'i-kiang, we caught a glimpse of the usual District pagoda on our right, at the southern end of a high mass of cultivation called T'ai-kung Shan, whose length we skirted for a couple of hours.

Of things we noticed on the road were blocks of dirty Fu-shun pan-salt, like flitches of bacon dipped in a dust-pan, or fragments of statuary dug from a Neapolitan sewer; jars of wine; and large iron pans coming from K'i-kiang. Dried beef, (all of which had died naturally), strung on sticks, came, we were told, from Kwei Chou: it looked like London cats'-meat. Also some more leopard skins. I observed a change in the shape of the bamboo rain-hats, which are smaller, lighter and flatter in Kwei Chou. One was covered with light blue cloth. At Sha-ho-tsz and another place a few *li* north of it are two very comely single-arched stone bridges, with steps on each side leading to the apex, as is the case in Peking. At each bridge there is usually a commemorative tablet and pillar. We also met a good number of short-horned cattle; some rough-coated, like the Herefordshire; others more like the Scotch breeds. My attention was also attracted to an albino buffalo with red eyes. From the fact of hay being stored in stacks 15 or 20 feet up the stems of fir trees, I suppose it is safe to conclude that the rains in these gullies often swell the torrent to a considerable height. Another kind of bridge or stepping-stones common in Sz Ch'uan torrents consists of blocks of stone dropped vertically into square sockets cut into the bottom. The water can rush through, and as the spaces and the stones are each about a foot across, chair-traffic can easily pass over. The only birds I saw, or have seen since leaving Ch'ung-k'ing, are occasional flocks of white

egrets, (*pê hao*), evidently in many cases tame; one pigeon; and a large brood of tame ducks being fed in a paddy-field, just as you see them fed at Canton. I also met several duck-houses being carried along, from which I infer that the industry is a considerable one. The duck-houses are semicircles or 'paddle-boxes' of coarse matting open at one side, and having a small door at the other. The only fruit trees we passed were occasional peaches or cherries, red or white, in flower; and orange trees (one bearing still a solitary ripe orange.) Bamboo, firs and pines, (fewer cypresses), with an occasional *hwang-kwo shu* (? *Ficus*), or 'hemp willow' (*ma-liu*) were the usual trees.

K'i-kiang Hien is 30 *li* from Hao Fang, and 70 from Lung-kang. The river makes a bend opposite the town, which stands on the left bank of the K'i-kiang River. I crossed at the ferry, and put up at an inn immediately outside the South Gate, the back room of which looks across the river in an easterly direction. The chief trade of the place is transport, much of the salt for the capital of Kwei Chou, T'ung-tsz, and Tsun-i, passing this town. It comes in junks to K'i-kiang, and at this season of the year has to be transported by coolies part overland to Kwei-yang. The coal export was once flourishing; but now it has dropped off, owing to the partial exhaustion of the mines, in favour of Nan-ch'uan coal. There is also a considerable production of silk and oranges. The number of licentiates allotted to the District is eight, against twenty to Pa Hien. The regular land-tax is only Tls. 2,300; against Tls. 36,000, and 9,000 piculs of grain-tax paid by the small District of Han-yang (Hankow) only one third its area.

Very little of the business part of the city is within the walls, but it extends about a mile along the tortuous bank of the river. In leaving the next day, we kept the river bank as far as Ch'iao-p'ao Hu, a market town on the left bank, through which a torrent runs,—*i.e.* probably runs, to judge from the precipitous and water-worn rocks. There are two small rapids between K'i-kiang and Ch'iao-p'ao Hu, the first called Ma-lau T'an, and the second Lo-tsz T'an. The river takes a circuitous course to the east at Ch'iao-pao Hu, and the road to Tsêng-tsz Ch'ang (where the road and the river again meet) branches off due south. We could see that in some places the river channel was not twenty yards wide; but as I

purpose to descend from the highest possible point, I shall have more to say on this point anon. To our right were a couple of peaks (the northern end of a range) connected by a ridge, and called Chi-kung Tsui or 'Cock's Beak.' To our left was a peak called Lau-Yün Shan, which appeared to be the highest north point of the range of hills on the right bank of the bend. P'o-she Ch'i is two *li* further on; and Shih-tao Ch'ang is sixteen *li* from K'i-kiang. We could now see that the southern end of Lao-Yün Shan ended in a peak, which formed a sort of high screen behind the other hills. The Cock's Beak began to open out too; and, after jutting up in a peak to the south, joined itself to a system of lower hills. I should think that the two mountains referred to were 3000 feet above the river bed. I enquired for the Shwang-shan Tsz, Shên-tu Shan, and T'ien-t'ai Sz, which had formed such good landmarks at Lung-kang, but was told that the first lay to the north-west, and was hidden by the hills to the north of Cock's Beak, whilst the other two lay to the north-east, out of sight.

Liang-lu K'ou is 25 *li* from K'i-kiang; and after passing this hamlet we ascended the smooth rocky slope of a spur which led due south to the summit of a connecting ridge. Near the top is a village and temple combined, called Yü-wang Kwan. As we passed the ridge, another magnificent amphitheatre of quite ten miles in diameter opened before us. To the left was a *chai-tsz*, or fortress, crowning a pinnacle which had been the refuge of the neighbourhood in 1864, when the rebel Shi T'a-k'ai had encircled K'i-kiang. Ma-k'ou Ya is 30 *li* from K'i-kiang, and here we descended by an uvula-shaped spur running into the amphitheatre. At the bottom was a most solid bridge over a torrent running through the village of Yu-lan Ho-'rh. The piers were what remained of the solid rock which obstructed the torrent, and were joined by enormous slabs of stone. Near this place I saw two Man-tsz Tung, or Aboriginal Caves, precisely similar in size and shape to those elsewhere described. Seven *li* further on is Kan-tsz Ya, whence we could see the other side of the amphitheatre. We were now ascending a spur similar to that we had just descended. Ta-lan Ya is 48 *li* from K'i-kiang, and Chin-chu Ti is seven *li* further on. The highest point of the southern face of the amphitheatre is Sin P'u-tsz, whence the road, bisecting the figure north and south, can be clearly distinguished.

A little farther on is Fên-shui Ch'ang, a market town of small pretensions. Ten *li* farther is Yao T'ang; and during this ten *li* the road runs along the edge of a precipice skirting a third amphitheatre, which we descended for ten *li* more in order to arrive at Tsêng-tsz Ch'ang. The total result of the day's journey is this. Rounding the hills which cover K'i-kiang on the south, we ascend by the east side of an oblong amphitheatre of which these hills are the west side. We then bisect a second, and descend on the west side of a third. During the day we saw several score of fields of opium, mostly as we got farther from K'i-kiang. The country was rockier and rougher than during the past three days, but cultivated wherever possible to grow any vegetable. Rape and wheat were the commonest, then broad beans, and fewer peas. Cabbages, lettuces, and, near Tsêng-tsz Ch'ang, the *Boehmeria* (or *Urtica*) *nivea*. We met coal coming from Kan Shui (on the Kwei Chou road) at 80 and 90 cash the basket of 120 catties, about one quarter the Ch'ung-k'ing price. It looked soft and smoky, and the price was for slack and lumps mixed. Baskets or cradles, so arranged as to fall over the head and distribute the weight, are commoner now than poles, and are evidently the same as those used by the Tibetan tea-coolies. Drugs and foreign cottons were being transported to Kwei Chou; also half-calcined *ch'ing-kang* wood, 'deprived of its smoke' only. Of fruit trees, we saw occasional oranges, plums, apricots, peaches; the three last in blossom. The dialect continued to be the Hankow dialect, almost pure and simple; except that it is better. The people began to look simpler and robuster, and less craven and suspicious, as is always the case when you are leaving large towns behind you. Near Tsêng-tsz I observed two white poppies in full flower; but as yet the poppy was not more than 2 or 3 feet high. There are a couple of pagodas at this market-town.

Crossing a bridge, the road from Tsêng-tsz Ch'ang now trends eastward, and follows the left bank of the river as far as Shê-p'i Wan, (or T'an), a market-town which takes its name from the bends above and below it. As we approached the frontier of Kwei Chou, we gradually perceived a simplicity and frankness quite foreign to the 'rats' of Ch'ung-k'ing. After quitting Shê-p'i Wan we turned south again, still following the river bank, and halted

at the Kwei Chou hostelry of Ch'ên-chia Pa. Looking back, we found the most prominent feature was the peak of Niu-kin Shan, a mountain which we saw again much further on. A good deal of opium was growing between Tsêng-tsz Ch'ang and Kan Shui, our next halting place. The *Boehmeria* was also common, as well as wheat, turnips, rape, and other *Brassicae*. The trees were much as the day before, except that the silkworm oak (*ch'ing-kang*) was now more extensively planted. We here came across innumerable yellow flowers, which I think must have been primroses, but every man seemed to have his own name. They looked like exaggerated cowslips, with four petals. Shê-p'i Wan is 10, and Ch'en-chia Pa 20 *li* from Tsêng-tsz Ch'ang; Kan Shui 30. At all the villages and hamlets we passed we saw women working the most antiquated hand-querns. At one village a woman was laboriously husking a few pounds of rice by treading with her miserable stump on a wooden lever called a *tui*, which fell feebly into a basin sunk into the ground. The querns seemed to be chiefly used for grinding peas and beans; but for rice a peculiar instrument is used in the shape of a narrow wheel running backwards and forwards, worked by men, in a stone trough. The term *nien tz* is also applied to this.

Just beyond Ch'ên-chia Pa is a prominent object in the shape of a conical black pagoda perched on the extreme point of a peak on the left bank. This is called Wên-pi-ko, and belongs to K'i-kiang. In fact, just about here, the Kwei Chou and Sz Ch'uan frontiers intersect each other in a remarkable way. As far as I could see, the principle on which the division has been made is to draw a straight line east and west from the south end of the Shê-p'i to the north end of the Kan Shui bend, all south of this line belonging to Sz Ch'uan, and all north to Kwei Chou. As Kwei Chou is south of Sz Ch'uan, this local arrangement is a little puzzling.

Kan Shui is a very considerable market-town indeed, and has a large silk, coal, and iron trade. The ore (*kwang*) is sold at 50,000 cash the 10,000 catties, rich or poor, including carriage to Kan Shui. This is thrown into huge furnaces of clay strengthened outside with wood, and the rough sheets (*shêng pan*) of iron which are obtained therefrom are sold at Tls. 2.8 the picul of 200 catties,

or, say, 4000 cash the 200 catties. Another furnace turns this into pigs, which (I think) the manufacturer said sold at Tls. 3.7; but here my notes are blurred. I went into one of the factories, and saw the melting furnace and the pan moulds. The fuel used is the half-calcined silkworm-oak already referred to, which costs 12,000 cash the 1000 catties. There are between twenty and thirty furnaces in and around Kan Shui, each one of which pays an annual tax of Tls. 90 a year to the K'i-kiang Magistrate. A 'Master' (*Shih-fu*) has to be kept at the exorbitant salary of Tls. 1 a day, in order to stop the cracks in the furnace, which he does, according to the popular version, by plunging his arm, if not his whole body, into the furnace. The pans sell at from 200 to 700 cash apiece, according to size. The whole annual trade in pans amounts to between Tls. 30,000 and Tls. 40,000 a year. These particulars were gathered in a very satisfactory way, for, a curious but not in the least rude crowd gathering round me in the 'hall' of the inn, I stood in the midst, and put them through a good half hour's questioning: as usual, I found the smallest boys the most intelligent, and the elderly men the most stupid. I also learnt from a communicative lad that 13,000 *yin* or 65,000 tons of Fu-shun salt passed through K'i-kiang every year. Formerly the K'i-kiang Magistrate (he said) made Tls. 10,000 a year out of this transit trade, but the new Government transport system had now knocked all this on the head.

Leaving Kan Shui, you cross a bridge over a small tributary of the K'i-kiang river, which latter here goes off to the south-east, the tributary turning south-west. Our road was along the right bank of the tributary, which is enclosed by high hills forming a gorge-like glen. We gradually ascended the bank higher and higher until we could trace the tributary from its source about ten miles to the west. The mountain scenery grew wilder and almost grand, as, from the top of the ridge we were mounting, we looked back and surveyed the road we had traversed. The hills behind looked like huge ripples on a giant shore, running east and west, and amongst the most prominent was Niu-kin Shan to the west. In the morning we had only seen the northern peak, but now we could see the whole mountain. As we ascended, we passed four iron furnaces, close together, on the left bank of the

tributary. For some reason they do not work iron in the four summer months.

At T'ai-kung P'u, 40 *li* from Tseng-tsz, there are two extraordinarily good inns, with quite a bustling appearance. I presume that the true explanation is that, where boat travelling is impossible, inns improve. The landlord told me that in K'i-kiang the land-tax was paid by the *mung* (or *mu*) instead of by the *k'wai* or 'lump.' It was arranged in three qualifying classes, and taxed accordingly, at from 50 to 200 cash the *mu*, (⅙ acre); but he said that, although K'i-kiang only collected about Tls. 3,000 nominal land-tax, in fact Tls. 20,000 to Tls. 30,000 were gathered under various specious names.

Our course now ran east until we arrived at Hwang-ni Ngao, a short distance beyond which a road to Ch'ing Yang Sz in Nan-ch'uan runs north down a valley which we passed on our left, we ourselves reaching the summit of a connecting ridge at Chiu-p'an-tsz, 12 *li* from T'ai-kung P'u. Here I made diligent enquiries for a tribe of Miao-tsz who I knew lived near here, and, having ascertained their surnames, (Hsiung, Ku, and Tsao), found a villager who undertook to introduce me to the Hsiungs. Just at that moment up came the whole Hsiung family, men and wives, with loads of coal on their backs. I at once made the men unstrap and engage in a philological discussion over sundry cups of tea, which civilized China was made to bring to the barbarians. The women wore a petticoat like a Scotch kilt, with nothing else on their legs but bandages tied round the shank, as is usual with Sz Ch'uan coolies. Their head-dress was a sort of white crownless flower-pot-like bandage or turban, and their coats, or upper parts of the kilts, were not different from Chinese coats. The men were dressed much like Chinese, with pigtails. This was only a ragged lot of immigrants, so that the opportunity of studying their dress and manners was not very favourable. However, I obtained a good number of words from the two men, who seemed delighted to hear their own language correctly pronounced by a stranger. Their tones are six, and resemble exactly the Hakka tones; but I had not time to go deeply into their system or into the grammar. They said they had no writing of their own. An intelligent little Chinese boy aged 15, who walked with me for

the next five miles, told me that he had seen numbers of Miao-tsz on his travels with his father. He said that brides went to meet their grooms mounted on 'yellow' (*i.e.* ordinary) cows, holding a parasol or umbrella over their own heads. He also said they were all buried in coffins. I hope to hear and see more of the Miao-tsz anon.

Descending into another valley, we crossed a bridge over another creek-like tributary of the K'i-kiang river at Kwan-yin Ch'iao-'rh, and, turning east, came one mile further to Kwan-yin Ch'iao village, which, again, stands on a creek running into the first-named creek. Neither of these creeks can be of topographical importance.

The vegetation of to-day differed little from that of yesterday. I noticed what looked to me like a beech-tree, which the peasant called *Fu-yen* or *Hwang-tien*; and another tree, which neither I nor my followers recognized, called locally the *Ho-pao-'rh hwa*. Just before crossing the Kwan-yin Bridge, we observed a road running off west to Ngan Wo-pa or Ngan-shêng Ch'ang, whence (I was told) most of the Ch'ung-k'ing goats are obtained. Near here we met some very fine white goats. At Kan Shui I was informed that there is a considerable industry in *Shan-sz*, or 'wild silk,' obtained from an insect which feeds on the *ch'ing-kang*. (As stated by the Shanghai Delegates), this wild silk, (he said), was all exported to Ho Nan.

Leaving Kwan-yin Ch'iao early the next morning, we followed the 'tributary of the tributary' in a southerly direction for about two miles, when our road commenced a steep ascent to the south-east. We must have mounted at least 3,000 feet when we arrived at the hamlet of Yang-kwo Lau. We could see from this elevation the ridge of Chiu-p'an-tsz a point or two west of north. The country grew more and more barren, and the only crops, (which seemed to struggle hard for an existence), were wheat, beans, and peas. Yet even at the highest point there was an occasional paddy field, and I even saw peach trees in blossom. The chief trees were fir, silk-worm oak, and the *Aleurites*. The last village or inn in Sz Ch'uan is Kiai-p'ai, which takes its name from a large slab a few hundred yards off, marking the southern limit of K'i-kiang. A mile further on is a smaller slab with the four characters

'Frontier of Sz Ch'uan and Kwei Chou.' There is no particular configuration of the ground which seems to call for a limit here, unless it be that a line almost due south from the slab would lead to the summit of a prominent peak called Miao-lung Shan. As soon as ever you pass into Kwei Chou, the land becomes almost absolutely barren, though no opportunity seems to have been lost of securing a few yards of wheat or beans. The range of mountain scenery is very fine on all sides. A number of coolies were conveying coal from a place called T'ien Pa, ten *li* to our left. The 'mountain price' (*shan pên*) was 16 cash a load of 80 catties, and the selling price, after a few miles carriage, from 60 to 120 cash. This coal is hard, if not anthracite, glistens like tar or jet, and crumbles in the hand. It gives out no smoke, and burns so quickly that it has to be mixed with clay. All the villagers had their stock of coal, which they burnt in a low mud furnace like a conical cap split twice from top to bottom at right angles. The coal is called *k'ang-mei*, whereas the very smoky coal of K'i-kiang is called *yu-mei*, or 'oil coal.'

The descent into the valley of the Sung-k'an River (*i.e.* the K'i-kiang River) commences at Chiu-tien Ya, 20 *li* from Sung-k'an, and is simply a long flight of steps as far as Han-chia Tien, half way. The next 10 *li* are through a magnificent and savage gorge, which is certainly the finest and wildest piece of scenery we have come across as yet. A summer torrent rushes through a picturesque bridge at a point called Chwa-chwa Chi, and the road is in some places propped up against the rocks by a mixture of brushwood and stones. Here also we met a number of coolies carrying the same description of glossy coal from a place to our right called Pê-ngai Ts'ao. I was exceedingly charmed with this descent, which had the piquancy added of a trifle of danger from the sudden gusts blowing round the turns of the gorge. The first bracing air I have felt in these parts was on this ridge at the entrance to Kwei Chou. The air was delicious, having been freshened by a night's rain. There must have been a difference of 15 degrees Fahrenheit between the ridge and the Kwan-yin Valley.

Sung-k'an is a shabby village of considerable importance, as villages go in these parts. The inns were disgusting, and the people excessively curious, though not rude nor violent. Their

curiosity was enhanced by my 'ordering a Miao-tsz' as a first step. One was unearthed at short notice, and I succeeded in obtaining from him an extensive vocabulary, which I append to this narrative. I now made arrangements for the descent of the river in open boats,—considered to be an extraordinary undertaking for a decent man. How it is to succeed the sequel will shew.

The descent of the Sung-k'an River is a novel and highly interesting proceeding. We embarked in three coracles, 20 feet long by six broad, made of elastic planks an inch thick. No sooner had we started, than the men jumped from the boat into the water, and held her firmly as she glided swiftly down a small rapid. These boats have no sails, no mast, no rudder. Each is manned by three hardy boatmen, who either wear no trousers at all, or tuck them up in their waist-gear. Each is armed with a bamboo pike, tipped with a sort of shovel-point of iron, and with this they poke and shove at the rocks, or at the bottom, as the boats glide by. The river bed is from 20 to 100 yards wide in many places; but at this dry season the channel is often only six feet wide. The boats do not draw a foot of water, yet they are as often touching the bottom as not, and in fact go over stones which are actually out of the water. The wood of which they are made is called *hsiang-chang*, which from its appearance and name I take to be a sort of camphor. No other wood, the boatmen say, is sufficiently elastic. The boats contain 320 Chinese feet of planking at 40 cash the foot, and cost therefore 12,800 cash; or Tls. 10, including labour. The bottom consists of three planks, and each side of three planks, each plank fastened to the other by small iron clamps. As the boat are not clincher-built, but carvel, it is wonderful how little they leak. The planks are about a foot broad, by $\frac{8}{10}$ of a Chinese inch thick; and the odd pieces go to patch up or join on ends, and make the whole harmonious. The only supports are four ribs on each side, five feet apart, and three cross-beams to stretch the boat, which quivers about as if a very coracle made of hide. Both when the water is high and when it is low, these boats carry but light weights,—a dozen men, or a ton of salt. We met a great number coming up with cages of pan-salt from Fu-shun, *viâ* K'i-kiang. Each boat carried 24 *k'an*, or cage-packages, of 80 catties each, being half a *pao*, or official package,

of 160 catties. Fifty *pao* make a *yin*. By the time the salt gets to T'ung-tsz Hien in Kwei Chou, its price has gone up from 40 to 60 cash a catty. In order to facilitate the salt traffic under the new system which he has inaugurated, the Viceroy Ting has employed a number of men to bore holes into and explode the rocks with gunpowder. By hammering lightly but patiently on a long iron chisel, the men told me they could bore three feet a day.

From the moment we were well out of sight of Sung-k'an, we saw no human habitations. Cultivation ceased, and we plunged into a series of narrow but lofty gorges covered with brushwood and wild vegetation. We twisted round corners, between stones, over rapids, through narrow races, along broad channels in endless variety, never stopping for an instant until we reached Lung-ch'uan, a hamlet 50 *li* from Sung-k'an. Our course was, first east, then north-east, and finally north. Falls of one or two feet occurred almost every hundred yards, and in some places the boats slid down at an angle of 20 or 30 degrees. I estimate that the fall during 50 *li* from Sung-k'an to Lung-ch'uan must be at least 200 feet, and that between Lung-ch'uan and Shê-p'i T'an 100 feet. The descent can only be compared to that of some of the Scotch trout rivers. There were numerous birds in the gorges: one a jet black diver about the size of a *mmah*; another bird like a large finch with a red tail and a crest; then there were several pretty birds of the rail kind. I saw no fish, nor heard of any. The names of the two first remarkable descents are San T'an and Kau K'o-'rh. At Ta T'an the course of the torrent seems barred, as you look north at a mountain stretching across; but this is the frontier, and the Sung-k'an River suddenly turns to the left or west, and becomes the K'i-kiang river. Another branch joining the Sung-k'an River at the Ta T'an and coming from the east is called the Sui-yen Ch'i, and is navigable by small boats up to Mo-hwa Miao. We are now in Sz Ch'uan, and commence the descent of one of the most romantic gorges it is possible to conceive: the sheer rocks on each side of the narrow gulley are at least 600 feet high, and in some places are honey-combed with the weirdest caves, covered with ferns, and mosses. In others, tiny cascades of spray drop from a height of 200 or 300 feet upon the boat as she passes under the overhanging cliffs. Looking back, nothing can be

seen in the shape of water but what looks like a tiny waterfall,—a race, in fact, which we have just descended. In every sense but one the river is unnavigable in the highest degree: it is only navigable in the not insignificant sense that boats can go up and down carrying each a ton of cargo. We should have been in a pretty pickle if it had come on to rain, for the boats are utterly uncovered and uncoverable; even when it is fine, they have to be baled out every half hour; there are no resting places, and it would have been very cold. But, nothing venture, nothing win. *The* gorge *par excellence* is called Hsin Fung Tung, and is worth coming all the distance to see. Lung Ch'uan-tsz is a small village on the right bank, where we had tiffin. The fall of the river opposite this village must be 20 feet at least in a hundred yards. The river here bends to the south, then the west, and finally turns north again. We met people carrying the same sort of anthracite or glazed coal which we had seen in the Sung-k'an gorge. Strange to say, the iron furnaces do not use this coal, but the half-calcined silk-worm-oak (*hé t'an*), which must cost them three times as much, as some coolies we met at Tséng-tsz told us they received 380 cash for carrying a load two days' journey to Kan-shui. The ropes which the boatmen use are all of coir, and appear most excellent. They, as well as the boats, are put together at Kan-shui. One *hên* (5 *chang* or 10 *p'ai*) of $\frac{3}{4}$ inch coir rope costs 240 cash, *i.e.* about a penny a fathom. One coil is made fast to a ring in the bows; another to one of the cross-beams amidships; and a third to the stern. Thus the boat can be pulled either backwards or forwards by one, two, or three men, exercising differently-directed forces. There is a hole in the stern, through which a short sweep is worked as a rudder when the depth of the water permits it. In some places there are several hundred yards of fine river, and then not only the stern sweep, but a long side oar is also worked. The country opened out a little after we left Lung Ch'uang-tsz, and scraps of cultivation began to shew. At T'iao-yü Tung there was an iron furnace, and a road to Chiu-p'an-tsz, (where we had seen the first Mioa-tsz), eight *li* away. A large iron pot with handles, &c., in fact a cauldron holding at least a gallon, only cost 200 cash, or 10 pence. The statements of the simple boatmen may be compared with those made by the crowd at Kan-shui. The boatmen said the

furnace licences were Tls. 94; the *shêng pan* iron 2800 cash the 200 catties, and the pig-iron 3400 cash.

At a rapid called Kwa-hwang-'rh, 50 *li* from Shê-p'i T'an, our destination, there was a road to Pê-shih T'ang, 20 *li* away. At Ts'a-t'a-'rh there was another furnace, and a road to Chiu-p'an-tsz, 8 *li* off. Our course contiuued north-west, and we passed a remarkable boulder on the right bank called *Sha-mau Shih* or 'Flap Hat Rock.' It looked remarkably like an old Irish hat, and had a tiny temple perched on the top of it. We now saw Kan-shui before us to the west, and soon passed the mouth of the creek along which we had a few days before so laboriously climbed. In another hour we reached Shê-p'i T'an, and I walked round by the river to Tsêng-tsz whilst the chairs went across. The rapids between these two places are so dangerous that even the camphor wood boats will not readily venture down: but now the Viceroy Ting and the Governor Ts'ên* (Kwei Chou) have united to clear this river of its obstructions; and, doubtless, before long it will be free all the way from K'i-kiang.

I walked, as I say, along the bank from Shê-p'i T'an to Tsêng-tsz Ch'ang in order to inspect a portion which was said to be impas-able. Certainly the rapids looked more serious than anything our light boats had passed over, and traffic did not appear to have begun yet; but efforts had recently been made to clear away some of the rocks, so that perhaps before another year shall have elapsed, these obstacles will disappear. Lower down, at a place called Kai-shih Tung, passage is entirely barred for a distance of four *li*. Some say the river here enters the ground; others that a portion of the banks has fallen across. I regret that I did not persist in inspecting this portion, (which consist of a 100 *li* bend between Tsêng-tsz and K'i-kiang), if only to dispel illusions. However, the threatening state of the weather rendered it unwise to trust too long to open boats.

From Tsêng-tsz Ch'ang to K'i-kiang we re-traversed the road we had taken in coming, and found that during the past few days many of the poppies had burst into flower. At K'i-kiang there were no comfortable travelling boats to be hired, that is, comfortable

* Now Viceroy of Yün Kwei.

even from a Chinese point of view. As I was determined to sail down the river, even though it should be astride of a plank, I hired a large sampan; the only protection against the inclemencies of the weather furnished by which was a sort of semi-circular mat, open at both ends, extending eight feet or so along the middle part of the boat. It took us three days to reach Ch'ung-k'ing in this comfortless abode; and, the weather having now changed to a dull drizzle, with the thermometer at 45 Fahrenheit, we expiated during this period the gratifications experienced whilst triumphantly enjoying a fine walk in fine spring weather to the borders of Kwei Chou. But, with a Bologna sausage in his pocket, and a sheep-skin 'to his back,' no reasonable man ought to find things anywhere much amiss as long as he can keep dry. My miserable followers huddled together like so many pigs, and, as is usually the case with Chinamen under desperate circumstances, lost all energy. Some of the chairmen even took to walking across country in order to keep warm, an almost unheard-of thing for a Chinese to do when he has a conveyance provided for him. The boatmen on this river are for the most part a fine brawny-limbed race of men, and, owing to the necessity of jumping into the water from time to time, usually go without trousers even in the coldest weather. From the moment you leave K'i-kiang, a succession of awkward and shallow rapids has to be passed, and, in most cases, although the river is pretty wide, the channel in the rapids is only sufficiently broad for one boat to pass at a time. The great nuisance of this river therefore is the having to wait whilst an assemblage of upward and downward junks blunders through. This happened to us several times between K'i-kiang and Pê-tu Ch'ang, 20 *li* down the river; and at Ch'iao-chia K'ou, 15 *li* further down, we were detained three hours whilst three junks ahead, and our own, were lifted and pushed inch by inch over rocks awkwardly situated right in the worst part of the rapid. As there were three dozen upward and downward junks awaiting their turn when we arrived, it is fortunate that our privilege as an 'official boat' allowed us to steal a march, or we should have been detained for two or three days. At this point the left bank belongs to K'i-kiang Hien, and the right to Kiang-tsing. The boats used on this river are almost all of one build, and easily distinguished from the long junks of

the Ho Chou River, or the crooked-sterned junks of the Kung-t'an River at Fu Chou. They are about 35 feet long, and about six or seven feet in the beam, very strongly built, having a squat appearance, with the bow much lower than the stern, which has no covered poop. Masts are only used for towing purposes by upward junks. The chief trade is, upwards, in salt, all from the Tsz-liu Tsing well in Fu-shun, and all transhipped at Kiang K'ou at the mouth of the K'i-kiang River. Each river boat carries one *yin*, or 50 packages of 160 catties each, and the selling price per catty at K'i-kiang is only 42 to 45 cash, or about five cash dearer than at Ch'ung-k'ing. The downward trade is in coal and oranges, a fruit for which Kiang-tsing is famous. All along the banks we noticed plantations of orange trees. They require manuring once a year, in the spring, after the autumn-winter crop has been gathered in; and at this time also care has to be taken to destroy a grub known as the *lau mu ch'ung*, which burrows into the trunk and the roots, and is destroyed by experienced hands with the help of an awl or style. The river takes many bends between K'i-kiang and Kwang-sin Ch'ang (in Kiang-tsing), 40 *li* from the former city, but its general course is north-west. The banks on both sides are at first rocky, but sufficiently cultivated; and, as the hills become more undulating, the scenery compares with that of the Min at Foochow. Anywhere but in Sz Ch'uan, where the eye soon becomes cloyed with mountain scenery of the rural and fertile type, the views would be considered unusually charming. We anchored at Fo-niu Ch'ang, a market town belonging again to K'i-kiang, and situated on the left bank. Soft or smoky coal is obtained in the neighbourhood of the town. The admirable coke known as the *wang-yan t'an* comes from a place on the Fu-t'ou River, 20 *li* above San Ch'i, at which last place, 30 *li* above K'i-kiang, the Fu-t'ou River joins the K'i-kiang River. There appears to be no concord whatever in the positions which published maps assign to the K'i-kiang River and its tributaries, the last mentioned one alone of which I have not seen with my own eyes. But the skipper gave me such a clear account of it that I feel convinced the above description is true. He said it was navigable at least up to the point mentioned, and ran into the District of Nan-ch'uan. I saw nothing whatever

of any tributary on the left bank, except such as is hereinafter mentioned.

The next place we passed was Wu-ts'a Ts'a, 70 *li* from K'i-kiang, and 10 *li* farther on Chia-tsz Ch'iao, 70 *li* from Kiang K'ou at the mouth, both places belonging to Kiang-tsing. After travelling another hour or more we came to Siao-ho Pa, which place, we were disgusted to find, was still 70 *li* from the *embouchure*, owing to a bend taken by the river. I noticed a number of willows on the bank (*ma-liu*) just bursting into leaf, and was told that the wood was utilized as fuel in the manufacture of gunpowder. We came across smoky coal mines again at Chieh-lung Ch'ang, about 35 *li* by land, and 45 by water from Kiang K'ou, and here noticed rafts of coffin planks of pine (*sha*) and cypress (*pê*). At Miao-chi-tsz, further down, but still 40 *li* from the mouth, large iron salt-pans are manufactured for the celebrated factories at K'ien Wei and Fu-shun, higher up the Yangtsz. They are about five feet in diameter, and weigh 12,000 catties a-piece, the cost being Tls. 52. Charcoal alone is used in the manufacture. Just below this town I saw a number of fishing cormorants (called here *lao-wa*) being fed on a bank in the river. They looked like a cross between a wild goose and a small vulture, as they stood flapping their wings in expectation of a morsel of bean-curd. Lower down, at the double rapid of Mên-ch'uan-tsz, there are sheer falls of two and three feet, and great care has to be taken to steer or 'sweep' between the imminent rocks. The whole channel of this river abounds in sunken rocks, every one of which appears known to the hero of the bow-sweep. In the swiftest rapid this powerful instrument can turn a short K'i-kiang junk round in half its length: indeed, we frequently turned three or four corners in one rapid, bumping and straining in a way which would break up a longer boat. The 'sweep-man' was a remarkably handsome fellow, with a most intelligent and well-chiselled face, and I could not help admiring his steadiness and nerve as he manœuvred us along.

Chou-wu Ch'ang and Jên-t'o-tsz, 25 and 10 *li* respectively from Kiang K'ou, and both on the right bank, are the chief centres of the salt-pan manufacture. Thousands of pans were lying on the bank, but I had not an opportunity of inspecting the moulds. The manufacture is said to be a monopoly in the hands of two

families. Tobacco shoots were being re-planted along the banks, after having been carefully reared under cover during the winter. Large junks carrying rough iron (*shêng-pan*) from T'ung-lo Hsia (Blakiston's 'Iron Gorge') now put in an appearance, with large cargoes of sheet iron for the salt-pan manufacturies just mentioned. The river takes another great bend at Chin-sha Chai, whence a river called the Lung-tung Ho runs in a southerly direction to Sha-t'an Ch'i, 100 *li* distant, navigable for small junks all the way. Chin-sha Chai is rather a conspicuous fortress crowning a hill, in the manner so common in Sz Ch'uan. Opposite this place I witnessed some otter fishing. The fisherman throws a large net from the bows of his craft into the water, and the otter, which is chained by the neck to the boat, dives down to pick up the fish. The otters themselves are caught by placing a net at the orifice of their caves or lairs, and throwing it over them when, impelled by hunger, they venture forth.

The river, after various turns, enters the Ta Ho or Yang-tsz at Kiang K'ou, a considerable market-town on the right bank of both rivers. The banks of the K'i-kiang river near its mouth are low and muddy, as is also the water for the last few miles; from which it is plain that at this season the level of the Yang-tsz must be higher. After passing the rapid of Chi-hsing Shih, where some awkward rocks lie in mid-channel, we entered what Blakiston calls the 'Limestone Pass,' passing a considerable market-town called T'u-kwan Yi, situated on the left bank. Orange orchards covered both banks, in some places as far as the eye could reach, and fringed the crests of the rugged hills. Kiang-tsing Hien (the Kiang-tsze of Blakiston) seems to have almost a monopoly of the loose-skinned orange trade (*kan tsz*). In K'i-kiang, coolie oranges (*ch'ên tsz*), and lemons (*chih-kwo*), are grown, and loose-skinned oranges are grown on the frontiers; but Kiang-tsing is *par excellence* the place of production for Sz Ch'uan. Coal and lime were being worked together at Lo-hwang Shih (right bank) and Pê-sha T'o (left bank) as when Blakiston passed. He calls these places Lo-whan-chi and Pa-sha-do respectively. A little further down, we left Chü-t'ing Sz (Blakiston's Kin-tin-tsze) on our left, and passed Yü-tung Ch'ang on our right. This latter place is evidently the village of which Blakiston says he failed to get the name. Just

below the town there is a notice by the District Magistrate, carved into the rocks, forbidding junks to anchor on either bank of the river. The last town of any size is Ta-tu K'ou on the left bank, and a few miles further down you sight the pagoda on the hill opposite Ch'ung-k'ing. Then the West Tower comes into view; you descend an angry-looking rapid a mile above the town; your nostrils are assailed by sundry malignant odours; and (if you are unlucky enough to live at Ch'ung-k'ing) you return to the dungeon whence you came.

The following Miao-tsz words are given, just as I took them down, with all their imperfections. To change, round, or embellish them would be to do what each reader with a taste for philology can do for himself. The asterisked words are those which I happened to ask both of the two Miao-tsz, and the words marked with a cross are evidently taken from the Chinese. The *gh* is as in Irish. The *Tch* as in *choose*. The *ou* as in *though*. The *ih*, when preceded by *sh* or *Tch*, as in Sir Thomas Wade's *shih* or *chih*. Otherwise, as in *yih*, the *h* final merely marks the entering tone.

Teeth	Naghpo*	Teats	Mi
Tooth	Nha	Breast	K'hao-tchu
Nose	Nkantchu	Hand	Tieh
Nose	Kiangtchu	Hand	To-niti (?fingers)
Fingers	Niti	? The	Lo *or* To
Fingers	Nyaliti	Mid-finger	Lenya-niti
Thumb	Nan-niti	Toes	Ni-teu
Thumb	To-na-liti	Tongue	Mblei
Forefinger	Nio-niti	Armpits	K'hao-tchou
Forefinger	Nia-liti	Veins	Aling
Ears	K'haung zhe	Skin	Ngha-tou
Ears	Luh zhe	Blood	Ngtch'ang
Hair	Plou-hou*	Arm	Ts'em-pang
Nails	Tou-ti	Arm	Tie-tch'ao
Nails	Tchou-tie	Leg	Tchogh-lou
Beard	Hu-tsz†	Leg	Ngieka
Beard	Fu-tsz†	Queue	To-mao-Tah
Neck	Kiat-la	Mouth	Ngiou (? Lips)
Neck	Tchak-lang	Mouth	Nghaniou
Throat	Tchao-pang	Eyes	Lum mao
Cheeks	Ap-lhou	Eyes	Ngha mo
Chin	Kou-tchai	Tail	Otchoka
Forehead	Hou-pla-plong	Male parts	Aplang
Belly	Aplang	Female parts	Yak aplang
Back	N'lho-kou	Testicles	Ngiokang (? Thigh)

Rump	Pao-tū	White	Kleu
Bones	Ngam-bang	Black	Klou-a
Joints	Lokati	Blue	Ndjo
Wrist	Lokloti	Green	Nola
Lips	Ngiou	Old	Yeu
Thigh	Ngiekang	Young	Niaghlo
Knee	Hou-tchiou	Mountain	Tauh
Foot	Teu	Water	Lie
Trousers	Lo Ha-tchi	Water	Klei
Socks	Ts'hai-t'hao-k'hu†	Earth	Ko-loh
Hat	Lo Mao†	Earth	Kwo-lah
Coat	Lo-Tch'ao shang	Wood	Ntung
Man	Tsi-ning	Wood	A-tsah
Man	Iliaoli	Tree	Ntung
Woman	Apo*	Hot	Kwo
Child	Ngia-to*	Cold	Tsa-leu
Maid	Nien-tsai	Big	Ghlu
Father	Tsi	Small	You
Mother	Na	Old	Tsi
Mandarin	No	Young	Na
Chinese	Shwa*	Quick	Oh-ah-tah
Miao-tsz	Hmung	Slow	Ta-ma-oh
Miao-tsz	Kau-a-kou*	Clean	Foun-djeh
Lolo	Ngan-tchih	Clean	Tch'ieh-ho
Pa-i	Aling	Dirty	Tchih-ho
Foreigner	Hmung Yiu	Dirty	Kh'hen-dju
Names or tribes of the two speakers	K'ha-tchiu K'hogh-mao	Good	Jung
		Bad	Tchih-jung
		High	Sha
		Low	Keng
Shoes	K'hou	One	Shoh
Trousers	A-tchih	Two	Awa
Kilt (Native)	Ta	Three	Pie
Head-dress	Shwa-tching	Four	Tiplouwa
Wind	Kio	Five	Kitchih
Air	Pang	Six	Kitchoh
Sun	Tch'ang-tu	Seven	Kishiang
Moon	Ah-lhi	Eight	Kiyih
Stars	No-ku	Nine	Kikioh
Heaven	Ntou	Ten	Kikou
N.S.E.W.	As in Chinese	Eleven	Kou yi
Rain	Luh-na	Twelve	Kou au
Snow	Lung-bou	Thirteen	Kou pie
Frost	Klou	Fourteen	Kou plou
Night	Kang-doh-la	Fifteen	Kou tchih
Early	Tanasu	Sixteen	Kou tchou
Dusk	Tchoung-doh-la	Seventeen	Kou shiang
Light	Poh-ki	Eighteen	Kou yih
Dark	Yoh-tchou-nuh	Nineteen	Kou tchioh
Yellow	Klang	Twenty	Ning kou
Red	La	Thirty	Pie kieu

Forty	Plou kiou	Table	Tchung*
Fifty	Tchih tchiou	Knife	Tutcha
Sixty	Tchou tchiou	Tea	Tch'ha†
Seventy	Shiang tchiou	Table (the)	To tchung
Eighty	Yih tchiou	Drink Tea	Hou tch'ha†
Ninety	Kioh tchiou	Eat (? rice)	Na mao
Hundred	Yi poh	Eat	Nao mao
Thousand	In Tchoh	Drink Water	Ho klei†
Myriad	Yi wan†	Spoon	Keng-tsz†
I	Ngio	Give	Kikao
You	Haghatchai*	Give	Naktchoulo
He	Ma	Wash	Sitei
Yes	Yaolo	Rub	Kou-wan-tchi
No	Tchih yao	Write	Shoun-tu
Not	Tchih	Write	Shou-neu
This	Tou-ning	Beat	Ndao
That	Tou-ning	Beat	Untoukao
Which is mine?	Lushao kaoni	Sleep	Tchu-lou
Which is yours?	Lusha kouni	Wake	Tchih
How many?	Hao-nou	Ride (horse)	Kien-ning
Many men	Tenento	See	Pola
Dog	Li	See	Pokie
Dog	Kliou	Hear	Hah-kü
Cow	Nioh*	Hear	Nao-luh (? Ear)
Horse	Ning*	Give birth	K'heng-yüeh-tu
Sheep	Tch'ih*	Walk	Mung
Fowl	Ka	Run	Nouh
Cock	Loka*	Sit	Ngiao
Hen	Poka*	Kneel	Ts'hou-tchiu
Pork	Mpwa	Dead	To-liu
Bird	Niao-nu	To smell	Na
Egg	Kai	Stink	Tchuh†
Ass	Nien-du	Sweet	Kang†
Mule	Lo-tsz†	Paper	Len-teu
Milk	Mai	Paper	Nou
Cows' Milk	Nao-mai	Writing	Mie-nou
Rice	Nja	Pencil	To tchün-tei
Beans	Tou†	Pencil	Jong
Wheat	Mao	Ink	Lo mieh-tagh
Unhusked Rice	Mlei*	Inkstand	Mieh-tagh
Millet	Kantchoh	Candle	Tchuh†
Sugar	T'ang†	House	Lo-tchi
Vegetables	Jou	Mat	Li
Oak	Nghamung	Bed	Tsang†
Mulberry	Joukang	Window	K'hau-tchi
Chopsticks	Tcheu†	Door	Atchung
Knife	Ngatcha	Saddle	Eng-ning
Fork	Atch'oh		

THE WILDS OF HU-PEH.

Of all the journeys which I have made in Sz Ch'uan, that which will dwell the most vividly in my recollection will be the last, or the exodus. Having met with an accident which kept me in close confinement for nearly three months, I at last found it absolutely impossible to withstand any longer the combination of noise and dirt which gives Ch'ung-k'ing its prëminence above all places of my acquaintance, and, though the water was uncomfortably high, I determined to risk it and come away. The travelling boat known as *Kua-tsz* is by far the best form of conveyance in going up the river; but owing to the top-heavy cabins, this craft is apt to be dangerous in coming down, owing to its difficulty in resisting, with light draught and feeble rudder force, the attacks of sudden gusts of wind. With ordinary luck the journey to I-ch'ang can be made in seven days; but if the wind and rain do not necessitate stoppages, five days, or even four, will bring you down when the current is strong. Foreign travellers, all of whom abominate unnecessary delays, would do well to ignore all excuses whatever offered with the object of mooring sooner than is necessary: the practical objection that the hands are tired is easily removed by a judicious present of money; but a more subtle one is advanced under multifarious pretexts and forms in order that each District Magistrate may prepare his formal despatch, and 'protect' the traveller through his jurisdiction. This protection simply means that a common coolie, despatch in hand, quarters himself upon your boat, renders no service of any description, and prevails on your boatmen to anchor at each district town. If a petty mandarin accompanies you, he will also detain the boat any length of time in order that he may levy the 400 or 500 cash with which each Magistrate is bound to supply him for travelling expenses. The Magistrate is obliged, moreover, to furnish boats for the mandarin and for the runner who carries the despatch, at forced prices; so that it is the interest of the victim of the *corvée* as well as that of the unwelcome passengers to arrange the waiving of this matter between them. In short the escort so ostentatiously provided is often rather a nuisance than a protection, and the cost of it somehow generally falls upon the foreigner. The best sort of boat to come down in is that known as the *Wu-pan*, a safe, speedy, and

roomy conveyance, the chief objection to which is that the covering is only of mat, and secures little privacy. The first day's journey ought to bring you to Fu Chou at least, and the second, with good luck, to Wan Hien. Thence to K'wei Kwan one more day, and it seldom takes more than two days to get from K'wei Kwan to I-ch'ang.

The dangers of the water route vary according to the height of the river. At low or mid water there is nothing to fear between Ch'ung-k'ing and K'wei Kwan, but at high water the rapids of Ch'ün-chu, just below Fu Chou, and Hu T'an, 10 miles above Wan Hien, are decidedly dangerous. At high water the appearance of a dangerous rapid is nothing like what a dangerous rapid presents at low water. Nearly everything is covered; there is no rushing or roar; but yawning whirlpools, and what may be called convex whirlpools,—*ku-fên*,—often make it most difficult for a boat to steer her course clear of obstructions. The *ku-fên*, or 'belchings of water,' are said to be caused by the current striking against some deeply submerged rock; the water, suddenly arrested, forces its way up, and appears on the surface in the form of a raised gyrating mass, which often pitches the largest boats into a whirlpool, or a *wo-ts'ao*,—a trough also caused by irregularities in the configuration of rocks;—an eddy; or a *p'ao 'rh*,—where the water 'cannons' off or on to some rock. As long as no sudden gust of wind renders the craft unmanageable, none of the above described dangers are very serious where there is plenty of 'sea room;' but in the gorges below K'wei Kwan it is rash to travel in any boat, least of all a *Kwa-tsz Ch'uan*, unless the *Yen-yü* Rock, at the upper mouth of the gorge, is 10 feet out of the water. The saying is:

Yen-yü ta ju ma,
Ch'ü-t'ang pu k'o hia.

Or—

When the Rock is like a horse,
You may not take a downward course.

The Ch'ün-chu Rapid, 3 miles below Fu Chou, gave us very little trouble, though we had to anchor above it half a day owing to wind and rain, and were caught in the middle of it by slight gusts of wind. Caution was required all the way down, but

nothing calling for the exercise of more than ordinary prudence intervened until we came upon the Hu T'an. The appearance of the river and the banks is so different when the water is high from what it is when the water is low, that I cannot at all recall the aspect of the Hu T'an Rapid in December. It is said that a ridge divides the stream in two, or stands in the middle of the stream at high water. This is at a point where the river turns a corner, and the great difficulty is to prevent being carried on to a huge rock or ridge which extends a good way out from the left bank. If a gust causes the boat to lose her head, or a whirlpool or *ku-fêng* throws her to one side, it is a bad case, and the crew must row for their lives. Singularly enough, we *did* lose our head through being hurled aside by a whirl, and, not only that, we snapped our bow-sweep in the effort to right ourselves. At the same moment the gunboat which was accompanying us, and had slowed down to watch our movements, got quite engulfed in a whirlpool, and went round and round several times before the crew could get her out. For our craft the position she was in would have been a most dangerous one. These events gave us all quite a turn, and I shall never forget the treacherous and savage appearance of the rapid as we whizzed into it round the corner, and steadily struggled with its waters. If the water had been a foot or two higher it would have been most dangerous, and the very next day three large salt junks were completely wrecked. In such cases the crew take to the spars, and are for the most part picked up by the life-boats which are in lurking at the most hazardous places.

When we got to K'wei Kwan, the Yen-yü Rock was about three feet out of water, and our boatmen seemed disposed to go down. Nevertheless a large number of junks, some of which had stayed there a whole month, were moored off the town, waiting for a safe opportunity to start. It is not that the boatmen will ever refuse to incur risk, no matter how great, provided a pecuniary consideration is given; but the supercargoes naturally object to risking several thousand pounds' worth of property in preference to waiting a few days; and time is of no consequence to any Chinese. The great point with the skipper is to avoid having to pay a few hundred cash a day extra for the maintenance of his idle crew, and the great point with the crew is to get down to I-ch'ang as soon as

possible in order to re-engage themselves on a journey u
downwards they receive little besides their food.

Our skipper thought it prudent to spend a day extra in
to allow the water to go down, and at the same time to t
about two tons of forward ballast in the shape of coal chunk
idea of taking in stone ballast for the safety of his junk
occurs to the mercenary Chinese boatman; but a ballast of
salt appears to him a very proper arrangement, for he can s
coal mixture at a profit of two cash the lump at I-ch'an
official asked my permission to store on board, for my ad
safety, a little extra ballast in the shape of half a ton
destined for his family, which request I granted on the
standing that if any question were raised at the *likin* offi
name should be tendered as the owner. I need hardly say t
fears for my safety at once vanished, and his family had
sent to them.

Well, the Yen-yü Rock was covered the next day, a
after junk arriving from the west moored off the town wai
safe opportunity. Heavy rains came on, and the water ro
six, then ten, then twenty, and finally forty feet in six d
was in despair, for I was exceedingly anxious to get away
a European face once more, but saw no chance whatever of
for a fortnight. At one time I had even thoughts of stril
K'ai Hien and Shen Si, thence coming down by the Han riv
usual way overland to I-ch'ang by the north bank was, it w
rendered impracticable by mountain torrents rushing with
force into the gorges. Not even a life boat would think of
ing down the river when the water in the narrows seetl
raged with mad fury. Crowds of idle boatmen, loitering al
banks in the same plight as myself, made a further stay a
Kwan absolutely intolerable. The situation was indeed de
and I almost groaned with ennui and impatience. I
medicines, no good food, no tobacco, no wine, nothing to
the inner man in case sickness should come on. After s
confinement I yearned to be up and doing, but the crowds
rain rendered walking rather a penance than a pleasu
active life in any form, with whatever hardships, was bet
that, and accordingly I set about making enquiries whethe

possible to get to I-ch'ang by the south bank. It was; but the road for the first few days was one almost untrodden by travellers; the inns were bad, the torrents were difficult to cross; and, finally, there were fourteen stages, the shortest possible time to get over which, in fine weather, was nine days. Never was I in such a predicament, and never before did I feel such an intolerable sense of imprisonment. I gave the summary order to depart, wet or fine, at daylight next morning, and after some trouble succeeded in finding a set of coolies willing to undertake the job. They were guaranteed by the famous Yang-tsz post-office, Hu-wan-ch'ang, which runs with such punctuality between Hankow and Ch'ung-k'ing; and, indeed, to Peking, Canton, and many other widely separated towns. Chairs and frames for the stowage of baggage (*kang*) had to be prepared over night, but all other arrangements were concluded within a few hours, money being the one power in China before which delays and difficulties bend. I left all my baggage,—everything I had in the world,—in the boat, enjoining on the skipper that on no account was he to venture down the gorges until the other junks started, but feeling sure none the less that he would consider the saving of two or three days' rice for a dozen men of more importance than the safety of my baggage. During the night it rained most pitilessly, and I could think of nothing but the hideous prospect of another day's delay. It seemed impossible that even gain could tempt Chinamen to start under such unfavourable circumstances. I could not sleep a wink, and long before day-break I was up gazing at the clouds, looking for the chairs; and wondering how on earth it was that misery could consist in such a paradox:—the impossibility of abandoning repose and comparative comfort, or at least plenty, for hard travelling, hard fare, filthy inns, rain, slutch, and every imaginable difficulty. Yet such it was. Here at least was something to be done; some difficulty to overcome; some determination to be shewn; and I could hardly contain myself with joy when I saw the chairs and the *kangs* on the other side of the creek in the pelting rain, and found my escort not only ready but only too glad to exchange a little land travelling for the life on board a gunboat. The gunboat captain was glad because he and his crew would save themselves the trouble of hauling the gunboat up from I-ch'ang,—a

matter of a month with the water in its present state. Moreover, any repairs to their boat had to come out of their own pockets, and the last time they had escorted a native mandarin down, they had lost everything but the hull of their boat on the way up again, owing to its overturning whilst struggling up against a rapid. It was therefore arranged that the captain and two marines should come with me; that four more should help my boat down when the water should have sufficiently gone down; and that six should remain in charge of the gunboat and of my boat until she should leave. The civil mandarin was glad because he liked the idea of seeing a little more of the world at some one else's expense; because he was a trifle nervous about the rapids; and because, anyhow, he would travel up and down quicker by land than by water. The naval hero's baggage consisted of absolutely nothing but a sword and a heavy pair of mud boots: the civilian, more luxurious, took his bedding and several changes of clothes. My servant and the two soldiers took absolutely nothing, and I myself took only what was imperatively necessary in the way of clothes, and a few things, such as books and documents, which it would be impossible to replace. We crossed in a miserable ferry boat the creek which separated our anchorage from the prefectural town of K'wei-chou Fu, and after a quarter of an hour's tying, weighing, arranging, and dividing, carried on in the pelting rain, started off in a long procession through the city, emerging at a miserable wharf or flight of steps a mile higher up stream. The spectacle of so many chairs and of the marines in our escort at once drove off the few likely boats which were moored alongside; and some time was spent in coaxing, one after the other, the most unpromising of frail craft to undertake the conveyance of our party across the swollen river. We had to creep slowly up the left bank for about a mile, then row hard across, and finally bring up at what looked like a mountain pathway just opposite the wharf from which we had started. I shall never forget the feeling of intense relief with which I bounded stick in hand on to the muddy bank, and the exhilarating sense of liberty with which I deliberately commenced to plod in the drizzling rain. The summer river at K'wei Chou is probably not more than 400 feet above the sea, and we mounted that day 675 metres above the high flood level, though there were

many ups and downs on the way. There was nothing which struck me as being of exceptional interest on the road; and even if there had been, I was so full of the absorbing idea of advancing homewards that I had no appetite for novelty of any description.

We passed no villages, nothing but rustic dwelling-houses at rare intervals: the land was rocky and poor, thinly and sparsely wooded, little cultivated, and dismal with incessant rain. We took our mid-day refreshment at a wretched hovel where there was nothing but maize to be procured,—not even a mouthful of vegetables. There was so little accommodation and space for man or beast that I made my meal of a chicken leg held in the fingers, helped down with a piece of hardbake. A pig, a cat, and some fowls waited respectfully by my side for any fragments I might throw away. We began our descent along the side of a narrow gorge down which, and down a similar one opposite to which, were rushing muddy mountain torrents. These join a mile or so further on, and form the Ta-tu River or rivulet, crossed by a ferry at Ta-tu K'ou, 35 metres higher than the Great River as we crossed it at K'wei-chou Fu, and running into the Ch'ü-t'ang or K'wei Gorge. In the winter time, and, in fact, always when the weather is not wet, the Ta-tu River is a harmless, clear stream; but now it was a raging torrent fifty yards wide, and just below the ferry became a rough and roaring rapid. The accommodation at Ta-tu K'ou was of the humblest description. One single room only, in a group of half a dozen or so of mud huts, was set apart for the reception of travellers. The furniture of this room consisted of a rough wooden couch covered with the ordinary grass mat or mattress, and absolutely nothing else. Into this room I was ushered, whilst the civil and the military mandarins wofully contemplated the prospect of sleeping on the bare ground or on the oil-nuts which were piled up in the corners. I had contemplated with indifference a little misery if only to shake off the effects of prolonged confinement, but I confess I only contemplated a qualified misery in peace and quietness. Fortunately there was an oil factory or oil-press a few doors off, and in this apartment were about twelve square feet of space where the rain did not come in. This was the place for me, and accordingly I gave up the 'furnished apartment' to the mandarins, and myself made a quiet shakedown

out of a couple of benches and doors. The tranquil solitude of this mountain retreat was decidedly soothing after the crowds of noisy boatmen at K'wei-chou. I quite revelled in the absence of chairs and tables, and in the insipidity of Chinese tobacco. Still I could not help being haunted with the thought of delays in crossing the river: the idea of not advancing onwards was more unsatisfactory than any hardships which Chinese poverty could heap upon me. The ferryman said he and his ancestors had worked the ferry for two hundred years and more, and had never lost a boat; that if it did not rain in the night we *might* cross next day towards noon; and that the ferry was a free one. I thought I saw an opening here for a little ingenuity, and I therefore asked whether by offering a liberal reward it would not be possible by hook or by crook to get across early in the morning. I would not specify the reward, but it would be so considerable that everyone concerned would be made happy. During the night I dreamt several times of crossing the torrent; but every time I woke I was relieved to notice that its roar was growing less. It had not rained during the night, and the water had gone down considerably, yet it seemed impossible that a frail boat could get safely across. However, Chinamen will risk anything for money, and shortly after daylight an assembly of villagers began to push the boat down over rollers into the water. The problem was to fetch, not an eddy, but a small recess at the other side where the water did not actually run down. Two empty chairs and a few coolies were the first load. The boat was dragged and poled up stream, and as far across at the same time as was possible for the draggers to wade safely. Then she was pushed out, poled, 'yuloed,' and rowed across amid excited yells, drifting down the while with terrible rapidity, but bringing up exactly at the right spot. I could not help shouting out some words of encouragement as I viewed this manœuvre from the opposite bank, a proceeding which the stolid Chinese seemed to regard as somewhat silly. Coming back was apparently easier, and was achieved in much the same way, except that instead of going up stream they shoved out and drifted down, poling up afterwards. The second load took the civil mandarin, two more chairs, and one of the luggage loads, and got safely over. All my baggage, the military mandarin and myself were reserved

for the final effort, as being three 'lots' undesirable to separate. This arrangement caused dissatisfaction and suspicion amongst the coolies, who seemed to think that my object was to get them and the chairs to the other side, and then bolt back to K'wei-chou. Crossing over was very exciting work: the waves were so large, and the current so rapid, that a very slight shake would have overturned the boat: we even had to catch hold of the overhanging branches at the other side in order to fetch the tiny recess, failing which we should have swept down the rapid and thence into the Yang-tsz gorges. Now came the time for the unspeakable reward. I had secretly thought of a tael of silver, though I entertained doubts whether even that poverty-stricken population would consider such a sum sufficient to compensate them for turning out early in the morning and risking their lives. What was my surprise therefore when the naval man suggested 200 cash! I overheard some of the boatmen murmuring something about six persons in all, and, half ashamed of so small an offer, thereupon proposed that I should present each of the six heroes with 50 cash (five cents). This reward was eagerly accepted with every demonstration of gratitude; and we parted the very best of friends.

The distance from K'wei-chou Fu to the Ta-tu River, which last forms the boundary between the two districts of Fêng-chieh and Wu-shan, is called by some fifty, by others sixty *li*. The river, where we crossed it to the east, was running from the south towards the north.

The second day was drizzly and miserably wet under foot. The climbs were steep, and the pathways difficult; yet I could not brook the confinement of a chair, much to the disgust of the naval mandarin and my servant, who felt it their duty to walk after me. The way in which the coolies, clad in nothing but a short cotton coat and trousers, and protected from the rain by nought beyond a broad bamboo hat, carried a heavy man, up a steep hill, through mud, and over the roughest rocks and stones, was simply marvellous. I noticed that they were mostly very young and vigorous looking, and found that only such coolies are willing to 'undertake by the journey' (*pao lu*) instead of 'by the day' (*lan t'ien*). I should strongly recommend the former system to travellers who like pushing on, for it is then the interest of the

bearers to shorten the time of the journey as much as possible; whereas, if they are hired by the day, the less they travel the better they like it, and the more apt they are to complain of overwork, bad accommodation, &c.

The morning's climb was exceedingly severe, and in many places the pathway was hardly distinguishable. At one spot we had to clamber up a sort of spiral staircase, difficult even for a pedestrian with hands free and supported by a stick; imagine, therefore, the painful efforts of the patient bearers, shod like horses with iron clamps tied under their straw shoes, and slipping amongst the wet rocks, with over a hundred-weight of baggage on their shoulders! The highest point was 783 metres above the Ta-tu River, and here the party separated, the civil mandarin, who ruthlessly kept his chair, taking a circuitous but easier route, which rejoined ours a few miles further on. This man belonged to the ancient family of Tsêng, and traced his descent through (I think he said) seventy lineal ancestors to his *shih-tsu*, 'Tsêng-tsz,' founder of the family and pupil of Confucius. The cradle of his race is Shan Tung; but the family centre of gravity is now Hu Nan, where a number of huge genealogical volumes are kept to which any Tsêng in the empire can refer when necessary, and in which their names are all carefully entered. According to him, no Tsêng, however mean or poor, and no matter where born, fails sooner or later to notify, through family branches, the head stock of his existence and name. Every Tsêng belongs to a *p'ai*, or 'family degree,' and no matter whether the *p'ai* character forms part of his actual name or not, his theoretical name contains that character. Three families only have their *p'ai* fixed by the Emperor, the families of K'ung, (Confucius); Mêng, (Mencius); and Tsêng, (? Cincius). Petition is periodically made for ten characters at a time, and when ten generations have been exhausted, second application is made. For instance, the late Grand Secretary Tsêng Kwo-fan and his brother Kwo-ch'üan,* belong to the *ch'üan-tsz-p'ai* [荃字派]; and the present envoy to England to the *chi tsz p'ai* [紀].† The first-named did not choose to employ the

* Since made Viceroy at Nanking.

† Two brothers or cousins of this *p'ai* hold office in Yün Nan and Kwang Tung.

'degree name,' but the second uses it as second half of his official designation. He might equally well have been named *Ch'üan* alone, or even *Ch'ü an-kuo*. The third uses the degree name,—*Chi-tsê*; but, differing from his uncle, as the first part of his official designation. I see no reason to doubt that every Tsêng 'knows his place,' for I subsequently witnessed several instances *en route* where persons in the Hu Peh Province compared family notes with my mandarin. At Kien-shih district, for instance, an old druggist came to the inn to interview the foreigner. The civilian was having his hair dressed in the yard, and enquired the old gentleman's surname. 'Tsêng' he said. 'Oh! then, we are of the same family. What is your *p'ai*? I am *Chi*.' 'I am *Ch'üan tsz p'ai*,' at once replied the druggist,—the identical degrees of the statesmen above-named. There are not many Tsêngs domiciled in Yün Nan, Kwei Chow, or Kan Suh, but Kiang Si, Hu Kwang, and Shan Tung are full of them: there are several hundred thousand in the whole Empire.

After surmounting the spiral staircase, we rested a while at a miserable hovel the owners of which appeared too stupid and bereft of interest in the world even to speak. They regarded us with a fixed and gloomy cow-like gaze, as though we were beings from another world. They offered no resistance when our coolies began to pluck the pumelos from the trees, and had even intelligence enough to say that the price was four cash apiece when I insisted on payment. Hó-t'ao Shu is 45 *li* from Ta-tu k'ou, and, after descending for an hour or two, we reached this village in the afternoon, and found a very tolerable inn. Owing to the incessant rains of the past three weeks the country around us was under water, and we had to skirt round instead of crossing a small valley to Miao-tsz Ts'ao. Miao-tsz Ts'ao, or Temple Basin, appears to be a name derived from the trough-like appearance of this tiny valley in the mountains. The town of Miao-tsz Ts'ao, where we found a very good inn for such a region, is 570 metres above the Ta-tu River. The productions of the country around are drugs, especially *hou p'o*, or *hou pu*, and *tang shên*; also tea, which is beginning to travel hence to Hankow for export abroad. Little or no opium is grown in the Districts of Fung-chieh and Wu-shan. The crops we had noticed on our way hither were millet, potatoes,

feet of her unwashed, uncombed, and ragged little girl. All the foot but the great toe was bent round under the sole, and a few leaves of a tree called the *ts'ê lan* were inserted to draw out the inflammation, or, as the old woman put it, 'to wither the superfluous flesh instead of allowing it to rot.' The poor little girl would suffer pain for four or five years. Fashion in a pig-sty; torture and respectability; beauty and stumps! It is remarkable that male Chinese are so well shapen and vigorous as they are, considering the unwholesome deformity of the mothers who bring them forth. From this squalid inn we mounted upwards and upwards, still amongst the clouds, along a very tolerable stone road. We met numbers of lean hungry-looking mules 'coming back empty' after conveying salt to Shih-nan Fu in Hu Peh Province, or carrying back loads of hemp to the place whence they had come, namely Tai-ch'i in the K'wei-chou Gorge. The salt is brought all the way down from Wu-t'ung Ch'iao. The clouds cleared off a little at Yü-chia P'ing, (250 metres above the Christian hovel), a considerable village station with plenty of accommodation for beast, *i.e.* mules, but none for man; though, as a matter of fact, the absence of furniture made the mules' stalls much more inviting to my taste than the interior of a traveller's apartment in an inn. As there are no asses in this part of the world, it is difficult to account for the presence of so many mules, but they are stated to come from Shih-nan. The Chinese about here said that there was no such an animal known as a jeannette, *i.e.* from a horse-father and a jackass-mother: they also denied all knowledge of an animal known to Chinese Zoology as a *t'ê*, which is stated to be a mixture of a donkey and a cow, or a bull and a female ass. As the colloquial meaning of this character is 'special,' perhaps the primitive Chinese mind, in endeavouring to figure out the idea 'special,' thought that the speciallest beast of all would be this combination. The winds are very violent about here, and we found it difficult work plunging through mud and struggling against wind at such an altitude. After making 35 *li* in all from Miao-tsz Ts'ao, we took our midday meal at a mountain station kept by a remarkably clean, tiny-footed, intelligent, shrewd, and humorous old lady who looked the very pink of neatness and respectability, and ruled the roast, (*i.e.*, boiled the

rice), with all the authority of a man. She had a fine cat, a fine female servant, and a fine dog; and neither she, her dog, nor her cat ever ate anything but potatoes: no meat, no rice, no vegetables, no tea: potatoes and water for woman and beast all the year round. She had a store of rice in the house, and we ate it, thus probably contributing to form an epoch in her life. Her total earnings were about five thousand cash (barely a pound sterling) a year, and once or twice a year she and her servant tramped to wine parties in the vicinity. The other items of local history to her mind were the occasional slaughter of a pig, and possibly the death of a plaguey one. Here was Chinese virtue and respectability seen at its best. So decent did the old party look, that one of our coolies asked her whence she got her chair for paying visits of ceremony. She explained that she kept a weather eye on the sun, and, when sure of a fine day, tramped there and back and imbibed wine all during one morning and evening. Like all her kind she had a keen eye for cash, and would have shewn us that she had a temper too, had I not summarily ended the dispute which she was raising by demanding to know, and then at once paying the difference. This act impressed the old lady very much. Her house was 1513 metres above K'wei-chou, or nearly 5000 feet above the level of the sea. Our highest point was at Han-ts'ao a little further on, almost at the boundary line between the Sz Ch'wan and Hu Peh Provinces, seventy-two metres higher than the potato family's residence. A great deal of vegetable tallow, resembling huge blocks of wax or marble, was being brought on man back from Shih-nan Fu to K'wei-chou Fu. The tallow is here called *mu-yu* or 'wood oil,' and is extracted from a tree locally called *mu-tsz shu* or 'wood-berry tree.' This is simply the *wu-chiu* or *Excaecaria sebifera*, which is known in Sz Ch'wan as *chüan-tsz shu*. The tallow industry, strange to say, is almost unknown in Sz Ch'wan, where the berries are little utilised. I was much puzzled by this name during my travels in Sz Ch'wan, where the *chüan-tsz* is one of the commonest trees; but, as I sent a specimen to Dr. Hance, there can be no mistake; so here at least is one question cleared up. The price here quoted was 50 0 cash the 100 catties, but whether at Shih-nan or K'wei-chou I forget. The rest of the day's journey to Shih-tsz P'ing was a miserable plod through rain, mud, stones, and

clouds. Probably the scenery would have been magnificent, for at one place the path ran along a narrow ridge which seemed to connect two bottomless precipices: during the last mile or two we appeared to be walking over coal. The den in which we were quartered at Shih-taz P'ing was about the lowest descent in the way of housing that I ever underwent. Imagine an apartment, walls airy, built of reeds and mud, possessing the single virtue of being well thatched: at one end a huge bed, warranted to accommodate 20 persons besides vermin, and covered with straw mattresses. The floor that of nature, and on it at three different places were kindled three log fires, round which huddled the coolies and the male portion of the household. No outlet at all for the smoke, which filled every nook and crevice of the apartment except the corner set apart for me. This was about eight feet by six, and boarded off from the rest: as the boards did not reach to the roof, I do not understand why the smoke did not suffocate me; but I suppose it followed out its own laws and could not descend. In this stall was a bucket filled with matter ultimately destined for the fields, and this bucket I speedily removed to the central hall, but, wishing to be sure that it was what I thought it was before ordering it out altogether into the open, I asked the landlord, who kindly said I might keep it in my own room if I liked, all to myself. The furniture of the outer portion was a huge jumble of rakes, baskets, utensils, caldrons, stores of maize, cobwebs, poles, and dirt. The meanest Chinese house has its 'withdrawing room,' or harem, even if this consists of nothing more than a plank barring the way to a sack-like mosquito curtain covering another plank. Noticing a lockup box or chamber something like my own at one end of the hall, I ungallantly enquired of the landlord whether, for the consideration of two hundred cash, (eight pence), the ladies could not all turn out in the wet and spend the night with a neighbour: this was because the civil and military mandarins were rather unhappy at the thought of having to be 'cured' by smoke, twenty in a bed, and seemed likely to accept my offer, unwisely made out of politeness, to abandon my floor to them. The landlord, however, said this was impossible, as the 'young ladies' occupied the 'inner chamber.' I believe for another extra hundred cash the ladies would have gladly removed from their bin to the

pigsty if they could have done it without being seen; but here the civil mandarin interposed, and said that rather than infringe the rites he would form one of twenty on the general bed. As there were no chairs or tables, he went to bed at once without his dinner, and the last thing I heard him say was that he had lived over 30 years and had never sunk so low as this before. On the whole I was pretty snug at this place, which was 156 metres lower than our highest point during the day. I think the total distance for the day was 60 *li*.

It rained heavily all night, and the miserable bearers, who had already had three weary days of wet and plodding, were in despair. However, sojourn at such a place was out of the question, and so off again we started next day in the pelting rain to Shên-lan P'ing, 194 metres lower down, and distant twelve *li*. Sometimes the bearers had to plunge through a foot of mud, sometimes pick their way through stones as scattered as those in the celebrated Nan-k'ou Pass near Peking. A Chinese road is often only so in a special and peculiar sense, as, for instance, a chain of dangerous rocks would be a road across the ocean. They serve to indicate a general direction, and the skilful navigator keeps them in his mind's eye, and tacks in various directions to avoid them, occasionally even crossing them or running over or through them but seldom along them. Eight *li* farther on is a mule-hotel-village called Sha-mu Liang, 250 metres lower again: and here the weather cleared up a little, and gave us some idea of the country through which we had passed. A most magnificent view opened out to the South, and a very remarkable serrated range of hills ran East and West as we advanced south-east towards our first District City in Hu Peh Province, Kien-shih *Hien*. Here we saw paddy fields again as we descended, and passed through a great deal of very red sandstone when we reached the valley. We crossed a river or branches of a river by wooden bridges several times, before finally crossing a considerable stone bridge just outside the city. Kien-shih is a tiny place with nothing to mark its civic rank but a mud wall, just like that of the little towns on the Kwei Chou frontier: there is absolutely nothing of interest in the place from any point of view whatever. I doubt whether any foreigner has ever been there before, in European clothes at any rate; and, although the

two mandarins were detailed off to keep away the curious, I was made uncomfortable by ill-mannered people poking holes in the windows and peeping at me. Some varnish is produced in the neighbourhood, and porters were receiving 12 cash the catty to convey it to K'wei-chou, where the price was stated to be over 300 cash the catty. It was doubtful whether this day's journey, which was over at 2 p.m., was 50 or 60 *li*. Nothing was to be bought at this city, *i.e.*, nothing which any village in a richer part of the country would not afford. The mandarins were able however to buy some pork, and the naval man told me that he was only in the habit of eating meat several times a month. I forgot to note the height of Kien-shih City, but it must have been about 1100 metres below Shih-tsz P'ing, and about 300 metres above the Yang-tsz as we left it opposite K'wei Kwan. Leaving the city next morning, for the first time without rain, we once more mounted to a height of 480 metres above K'wei-chou, and then descended to a river called Ma-shui Ho, which I take to be either the same river that we crossed at Kien-shih, or a tributary of it, and by the level of which I estimate the elevation of the city. The prospect of delays at the ferries of all these swollen rivers tended to mar any scrape of enjoyment that might otherwise have been picked up on a rough mountain journey. The Ma-shui Ho was crossed by a free ferry much in the style of that at Ta-tu K'ou; but the river was not nearly so dangerously swollen. About half a mile below the ferry a bridge was being constructed, but did not appear to be in a very advanced state. Liang-fêng Ya, 340 metres above the bed of the Ma-shui River, was the highest point attained during our fifth day's journey. Thence we descended, through very beautiful mountain scenery, 240 metres to Ho-shui P'ing, a market town taking its name from the long flat valley and the river which winds through it from east to west, and which appears to be the same as the Ma-shui River. Properly we should have forded the stream at Ho-shui P'ing; but, as it was too deep and rapid to be pleasant crossing for bearers with loads, we followed its right bank up to San-li Pa, a considerable market town 15 *li* further east, where we crossed a ford with no more damage than a little wetting, though the bearers had much difficulty in keeping their feet. By taking a round by the upper end of the town, not more

than a mile, we might have crossed by a plank bridge; but Chinamen are so constituted that a short cut, even less advantageous in the long run, has always greater charms for them than circuitous safety. San-li Pa is under the District of Kien-shih, from which it is distant 60 *li*. The salt consumed in this neighbourhood is a blackish powdery kind from the Yün-yang District. The Yün-yang wells are stated to be 120 *li* from Yün-yang *Hien*, and are altogether different in appearance from the deep, narrow wells of Fu-shun and Shê-hung, already elsewhere described. They are large enough for half a dozen men to stand round in order to haul up the brine. They are said to have been worked over 2,000 years. The salt was selling at Liang-fêng Ya at 56 cash the catty, but every few miles of carriage of course affects the price.

From San-li Pa we mounted 343 metres, through firs and pines, a distance of 10 *li* to San-koh Ya, where we put up at a mountain block-house kept by a family named Chang. The head of the family was a venerable old fellow of 80 years of age, who occupied with his wife, who was still living, a secluded apartment in the harem portion of the building, separated, as is often the case, from the main part by the kitchen or cooking range. A number of healthy well-grown youths, in whom it was easy to recognize a family likeness, came crowding round, and these turned out to be the old man's grandsons. They called themselves 'brothers,' and were somewhat surprised when I divided them off into groups, and allotted to them several mothers. It appears, however, that each group was one of cousins; but, notwithstanding this, a family likeness was apparent. The father of one group was the business man or landlord of the place, a fine, hairy, independent looking man of 50 or more; and his wife did the honours of the rice cauldron. Some of the youths were married and had sons, so that there were four generations on the spot. It was interesting to see the 'lean and slippered pantaloon,' the son 'bearded like a pard,' and the sympathetic faces of the youngsters grouping with easy respect round the old man, as he dandled a 'muling and puking' infant. The house was solidly built of adobe, and well provided with doors, shutters, and other wood-work: though really little better than a rustic barn in England, it had, compared with the slimy, ricketty, and filthy inns of Sz Ch'uan, quite an ancient,

river, (and many of which were already being cut in preparation for a new bridge which it was proposed to construct), rolled into the river by half a dozen men would have saved hundreds of coolies daily from dangers of the ford. Our naval mandarin, with a zeal for philanthropy *(tso hao shih)* which is as rare as it is highly appreciated amongst the Chinese, set himself to kick or push aside the brick-bats and stones which here and there tended to embarrass pedestrians. Altogether, this man shewed a kindliness of disposition and a disinterestedness quite exceptional amongst his countrymen, and especially amongst those of Sz Ch'uan. I think it due therefore both to him and his countrymen to chronicle impartially a circumstance in his and their favour. When all is said and done, and however unpleasant it may be to dwell in Chinese fashion amongst the Chinese, as men they are probably neither better nor worse than ourselves; and in spite of dirt, small feet, shiftlessness, and greed for petty gains, are justly entitled to claim credit for a system which produces industry and content, though the latter be only of a low order. If communications were improved, the security of property guaranteed, and justice administered impartially between man and man, they have in them the makings of a nation second to none. I must add, however, that the people about Cha-k'ou Shih appeared to be stupidly and brutally ignorant: and it was not specially they who led me to indulge in these favourable reflections. From this place we made thirty more *li*, 75 in all for the day, to Sha-p'ing,—a very good day, the best travelling we had done. Sha-p'ing is 216 metres above the ford where we witnessed the accident, but is still in the long valley down which runs the mountain stream in question.

I urged the escort and the chairmen to endeavour to accomplish the rest of the journey in two days. We had still 180 *li* to go;—only 60 miles; and yet such was the effect of confinement, such the wearing influence of delay and discomfort that an extra day appeared a little age. Next day we continued to crawl, now more steeply, past Lu-tsz P'ing, up the long valley already described, 25 *li* to P'u-tsz Ling, 482 metres above Sha P'ing: then we descended 400 metres, and 25 *li*, to Ho-chia P'ing, where the people were only just (middle of October) reaping the rice and thrashing out their beans. In Sz Ch'uan, (and of

course all the more in those mountainous districts on the Sz Ch'uan and Hu Peh frontier), there is no such a thing as a double crop of rice in one year: yet it is said that at a place called Wên-t'ang, in K'ai Hien in Eastern Sz Ch'uan, there is occasionally a double crop: perhaps the climate is there locally affected by hot springs which possibly give the name to the locality. The civil mandarin told me, if I remember rightly, that, although there were both summer and autumn crops of rice in his province, (Hu Nan), yet they were never grown during the same year on the same land. Near Canton, too, I remember the agriculturalists used to say that a different kind of seed was required for the spring and autumn crops, and that the spring rice would not grow in autumn, nor the autumn rice in spring: these facts appear to open problems in agriculture worthy of attention.

We now mounted 235 metres to Ch'in-ning K'ou, 10 *li*, and then went down 60 metre to Ch'ing-kang Pò, 10 *li* more: next we descended 75 metres through the lovely gorge of Lo-sz Kan; then up again; then down once more 180 metres below the gorge to T'ao-tsz Ya, having done a hard day's work of 80 *li*, with 100 *li* more before us to I-ch'ang. I now found that the species of oak universally known in Sz Ch'uan as *ch'ing kang*, is here also called *hwa li*, and the acorns of the same tree, which we picked up on the road, were called *siang tsz*, a name applied to the oaks near Peking. I sent an incomplete specimen of the *ch'ing kang* to Dr. Hance, who says it is probably the *Quercus mongolica*, Pall.; but possibly *Q. aliena*, Bl., or the *Q. Fabri*, Hance. A combination of Hu Peh and Sz Ch'uan coolies enable me to say positively that the oak known as the *fu li*, or perhaps *hu li*, is not the same. I secured acorns from both, but I am sorry to say I now forget which is which.

I need hardly say that we rose at a very early hour the next morning, but it was difficult to get the bearers to advance at more than their ordinary speed. Ten *li* brought us to Tien-sin P'o, after which we descended to T'ai-shih Ch'ao, our lowest point since leaving the Yang-tsz at K'wei-chou, being only 70 metres, or about 230 feet, above the level of the Great River at the time we crossed it, and this without taking into consideration any possible barometrical changes. We followed for some distance the bank of a

beautiful stream winding through a quiet and peaceful valley, full of villages, and having a most tranquil and civilized look after the wild and barren mountains up and down which we had been ceaselessly clambering during nine days. I had hardly patience to remain in my chair at all, though I was hardly yet in a condition to do much walking. Another 10 *li* brought us to Siao-hwang Ling, and we left the valley after passing Kau-chia Yen, mounting for the last time a few hundred feet to Shih-t'ou Ya, a ridge which forms the boundary between the district of Ch'ang-yang and the district of I-ch'ang. There for the first time we obtained an extensive view of the Hu Peh plain and a glimpse of the Great River, still 20 miles (60 *li*) distant below I-ch'ang. The mountains forming the right bank of the I-ch'ang gorge seemed mere hillocks compared with those we had recently traversed. It seemed doubtful even then whether we should be able to reach I-ch'ang that day, for the bearers were utterly worn out, and limped along in a painful way which even the prospect of extra pay could not alleviate. Ten *li* brought us to Yao-chia Lin, now only 40 metres above the K'wei-chou level, and the rest of the journey was simply a struggle onwards, hired men relieving the bearers wherever they could be induced to close a bargain without wasting time in talk. At this point I could think of nothing else but seeing white faces again, and I allowed levels, hills, rivers &c., to take care of themselves. Luckily I was just in time to catch the last downward steamer for the year.

SZ CH'UAN PLANTS.

The plants enumerated in List No. 1 represent those, out of a total of about 300, collected by me in Sz Ch'uan, which my patient and obliging friend Dr. Hance has been kind enough to identify. This incomplete work has been performed under great difficulties. As regards myself, I can scarcely pretend to an acquaintance with even the elements of botanical knowledge; and I had to collect at random, unprovided with apparatus for preserving the specimens, whilst travelling comfortlessly from place to place. To have stopped to make more deliberate collections in the neighbourhood

of the towns would have been to attract crowds of suspicious natives; whilst to have stopped in the country would have been to unduly contract the ever empty stomachs of my hard-working bearers: other obstructions, too numerous for description, may be imagined by anyone who has travelled in the interior of China, and the more vividly by anyone who has travelled in a poor and mountainous part of the country, (amongst natives more suspicious and ignorant than the average); and alone. As regards Dr. Hance, he has naturally been hampered in his good-natured efforts by the incompleteness of my specimens, which in spite of salutary warnings, were, I understand, provokingly unprofessional, not to say downright discreditable. Thus, barely a quarter of my whole collection has been found susceptible of complete identification, whilst not more than a quarter of that quarter (those names which are underlined or italicised) can be fitted with Chinese written names at all coherent or certain. Of this happy few, again, not more than one half can be conscientiously pronounced correct as to more than sound.

The plants enumerated in List No. 2 speak for themselves. They illustrate alike the incompetence of the collector and the desperate efforts of the charitable botanist.

It might well be asked: why offer such an unsatisfying meal at all? The answer is that many distinguished enquirers have found it not beneath them to adduce in support of their theories an occasional lucid fact picked out from the chaos of unpractised travellers' experiences in lands too remote to fall within the direct range of the scientific eye: so, those who are making praiseworthy efforts to establish a living nomenclature for Chinese plants may perchance from this haggis-like purveyance succeed in extracting one or two mouthfuls of solid meat in support of doubtful facts, for the satisfactory solution of which their stomachs are a-hungering.

The great botanical questions of which Sz Ch'uan is the theatre are, I am told, these: What is the varnish tree? What are the wax trees? What the different sorts of oaks and mulberries? I am afraid I have done very little to aid in elucidating these matters; though no one perhaps has seen, or might have seen, more oaks, varnish trees, and mulberries in Sz Ch'uan than myself. The difficulties are, firstly, to find

anybody who knows anything for certain; secondly, to get him to state truly what he thinks he knows; thirdly, to get two or more to agree, independently, to one statement; fourthly, to reconcile such agreement with statements to the contrary effect at another place; and fifthly, to make sure that two plants or trees at different places are, in fact, the same. Sometimes I succeeded in getting the flower, but no fruit; at others the leaf, but no flower: and when I had got them, I often found it hard to keep them in a whole condition. From the platform of considerable ignorance, however, I may be permitted to hazard a few crude observations.

The vegetable tallow tree, *chiu*, is popularly unknown in East Sz Ch'uan by any other name than of *chüan*^{3}*-tsz shu*^{2}. No one knows the character, but I venture to suggest the one given in the list (No. 24) for reasons which belong to the department of philology rather than that of botany.

The celebrated wood-oil tree, *t'ung-tsz*, stands quite apart in its nature from all other trees of whose names the character *t'ung* forms a part, *e.g.* the *Sterculia*.

The sound *ʿp'ao*, which Dr. Bretschneider, citing excellent ancient authority, informs me should be written 苞, seems to be the generic word for 'berry,' and all the strawberries, (if there be any), raspberries, blackberries, &c., bear this name. The plant which Captain Gill thought was a wild strawberry is the *shé p'ao* or *Fragaria indica*, Andr. The word *Rubus* might be considered almost interchangeable with the word *ʿp'ao*.

The character 蓼 appears to stand invariably for the genus *Polygonum*, and this assumption is strongly supported by both my Canton and my Sz Ch'uan experiences.

The commonest large tree in East Sz Ch'uan is the *ʂhwang koh, shu*^{2}. The ordinary Chinese literates do not know the characters. Foreigners have held it to be some sort of a fig or banyan. It is an evergreen.

Oaks are seldom allowed to grow: they are rarely more than shrubs, soon to be cut for firewood. The commonest Chinese name is *ʿch'ing ʃang*, and no regular characters are popularly known. The additions 'water,' 'dry,' 'many-leaf,' &c., &c., are often placed before the generic word, and oaks often 'run into' mulberries. The book word *siang*^{1} appears to be unknown in East Sz Ch'uan.

There are many varieties, perhaps species, of the tobacco and mulberry plants, whilst the wax trees and insect trees are, so far, hopelessly involved.

LIST NO. 1.

1. Abelia serrata, S. and Z. 蓮花梗.
2. *Abutilon Avicennae*, Gaertn. 桐麻.
3. *Aleurites vernicia*, Hasak. 桐子.
4. Ammannia rotundifolia, Roxb. 水莧菜.
5. Aretium maius, Schk. 牛榜 (pron. ʿp'ang).
6. Boltonia indica, Bth. 魚秋眞兒.
7. Bromus japonicus, Thunb. 野梅簽.
8. *Canna indica*, Linn. 水芭蕉.
9. *Cephalanthus naucleōides*, DC. 風箱 or 攔 (pron. ʿt'a) 狗耳.
10. *Chrysanthemum Roxburghii*, DC. 銅菁.
11. Cnicus segetum, Bth. and Hook. f. 鵝居婆.
12. Commelyna communis, Linn. 竹葉菜.
13. Convolvulus acetosifolius, Turez. 面根藤兒 or C. sepium, Linn.
14. Convolvulus (Calystegia) acetosifolius, Turez. 來江藤兒.
15. Convolvulus sepium, Linn. 面根藤 or 鷄屎條.
16. Cornus paucinervis, Hance 臭黃荆 or 南天種.
17. Crepis japonica, Benth. 雀雀草 (or 菜) (or 包) (or 台) or 牛屎花 or 牛石花, or 鴨屎條.
18. *Daucus carota*, Linn. 山蘿卜.
19. Dichrocephala latifolia, DC. 山胡椒.
20. Eclipta alba, Linn. 豕豆草.
21. *Elaeagnus umbellata*, Thbg. 牛奶子.
22. Emilia sonchifiora, DC. 牛石 (or 屎) 條.
23. Enkyanthus quinqueflorus, Lour. 吊鐘花.
24. *Excaecaria sebifera*, Müll. Arg. 梭子.
25. *Fragaria indica*, Andr. 蛇胞 (pron. ˌp'ao).
26. Galium uerum, Linn. 小阡 (pron. ch'ien') 草.

27. Gardenia florida, Linn. 字子花(草).
28. *Gentiana squarrosa*, Linn. 龍丹草 or 子花地丁.
29. Gymnothrix hordeiformis, Beauv. 狗尾草.
30. *Hemerocallis fulva*, Linn. (土)金針(菜).
31. Hemistepta lyrata, Bunge 野紅花.
32. *Hibiscus syriacus*, Linn. 木槿花.
33. *Houttuynia cordata*, Thbg. 蕺耳根.
34. *Hovenia dulcis*, Thbg. 枳椇.
35. *Hypericum Ascyron*, L. 金絲蝴蝶 or 黃海棠.
36. Hypericum attenuatum, Choisy, 趕山鞭.
37. Hypericum japonicum, Linn. 地鼻椒.
38. Hypericum uralum, Ham. 垣(or 轉)上黃 or 洋雀草.
39. Jussiaea repens, Linn. 野花生.
40. Lepidium ruderale, Linn. 積鴉菜.
41. Ligustrum lucidum, Ait. 暴虺蟥.
42. Limonia? trichocarpa, Hance, 鐵(鈴樂? 兒 or 鱗甲兒).
43. Lippia nodiflora, Rich. 過江藤
44. Lotus corniculatus, Linn. 綠豆秋兒.
45. Lycium Chinense, Mill. 狗底耳.
46. Lysimachia [? Alfredi], Hance, 過路黃.
47. Lysimachia Christinae, Hance (or japonica, Thbg.) 大小過路黃 or 野花生.
48. Lysimachia clethroides, Duby 野七里香.
49. *Malkotus barbatus*, Müll. Arg. (wild medlar) 野枇杷.
50. Marlea begonifolia, Roxb. 八鐵風 or 八爪金龍.
51. Mazus rugosus, Lour. 班鳩窩 or 班秋窩.
52. Melastoma candidum, Don, 哦口巴.
53. Melica scabrosa, Trin. 臭草 or 野小艾.
54. Melilotus macrorhiza, Pers 苜菜 or 燁雀.
55. Millettia sericosema, Hance, 崖豆花.
56. Mussaenda pubescens, Ait. 臭黃荊.
57. *Nicotiana tabacum*, Linn. 烟 or 菸.

58. *Ophiopogon japonicus*, Ker, 貓兒眼 or 土麥冬.
59. *Ophiopogon gracilis*, Ker, 土麥冬 or 貓兒眼晴.
60. *Origanum vulgare*, Linn. (Marjoram) 薄荷.
61. *Oxalis corniculata*, Linn. 酸漿草.
62. Paederia tomentosa, Bl. 鷄屎藤
63. Paliurus Aubletia, R. and S. 鐵離芭.
64. Phytolacca acinosa, Roxb. 見種銷.
65. Polygala japonica, Houtt. 遠志.
66. *Polygonum criopolitanum*, Hance, 蓼子草.
67. *Potentilla discolor*, Bunge. 烏皮浮兒 or 觚角草.
68. *Prunella vulgaris*, Linn. 夏枯草.
69. Pterocarya stenoptera, Cas. DC. 麻柳.
70. Quercus (mongolica, Pall.; or aliena, Bl.; or Fabri, Hance) 青崗.
71. *Quisqualis indica*, L. 使君子.
72. *Ranunculus chinensis*, Bge. 鴨脚板.
73. *Raphanus sativus*, Linn. 蘿卜菜 or 滿陽花.
74. *Rhus semi-alata*, Murr. 漆樹.
75. *Rosa microphylla*, Roxb. 茨李 or 刺梨.
76. *Rubus Parkeri*, Hance 烏胞.
77. *Rubus triphyllus*, Thunb. 蒿央胞 or 黃胞.
78. Salvia plebeia, R. Br. 野蘇麻.
79. Sedum Alfredi, Hance, 馬屎草.
80. Sedum drymarioides, Hance, 臥兒菜.
81. Senecio Oldhamianus, Maxim. 野蒲桃 or 葡萄.
82. Solanum nigrum, L. 天砲.
83. Stachys modica, Hance 牛舌條.
84. Sterculia platanifolia, Linn. 桐毛耳.
85. *Verbena officinalis*, Linn. 鐵馬鞭.
86. *Viburnum cotinifolium*, Don, 洋石子.
87. Vicia multicaulis, Ledeb. 野毛耳 or 金豌豆.
88. *Vitex negundo*, Linn. 黃荆.
89. Wahlenbergia agrestis, A. DC. 娃兒草 or 玩兒草.
90. *Zizyphus vulgaris*, Linn. 棗子.

LIST NO. 2.

1. Allium 山慥頭.
2. Andropogon 甘支(?蔗)草.
3. Bothriospermum 鴨根草 or 綠雀兒草.
4. Brassica 青魚鬍.
5. Brassica 青菜花.
6. Chenopodium 灰毬(or 藜)菜.
7. Cichoracea 蒲公英.
8. Clerodendron 臭牡丹.
9. Conyza 陽艾 or 野艾.
10. Corydalis 斷腸草.
11. Cupressus 栢(木)子.
12. Fern (barren) 仙鷄尾.
13. Ficus 山地瓜 or 鎮刀子兒.
14. Fraxinus 白蠟樹.
15. Geranium 老灌草.
16. Gnaphalium 清明菜.
17. Hypericum 對葉草.
18. Indigofera 苡威油.
19. Jussiaea 對對草 or 過江藤.
20. Lactuca 窩笋.
21. Lespedeza 串子草 or 野瓜門兒.
22. Limnanthemum 午時 or 午心花.
23. Lysimachia 野刷把.
24. Panicum 水子米.
25. Phaseolus 黃豆.
26. Phaseolus 四季豆.
27. Phyllanthus 篾盤子兒.
28. Pinus 松.
29. Polygonum 青蓼 or 蓼子草(or 菜).
30. Pteris 鳳尾 or 冷厥鷄.
31. Ranunculus 貓脚草.

32. Rosa 金英子 or 墻古兒.
33. Rosa 青皮子.
34. Rumex 土大王 or 牛耳(黃 or) 朵.
35. Scirpus 山能(? 棱)子草.
36. Sedum 小夫子甲.
37. Senecio (? Senecillis) 肥猪苗.
38. Solanum 海椒.
39. Ternstroemiacea 茶.
40. Thalictrum 搶蒼子 or 過路黃.
41. Thalictrum 山黃連.
42. Viola 地黃瓜.
43. Umbellifera 茴香.
44. Xanthoxylon 野花椒.

INDEX.

Actors, 103.
Admiral Ho, 4, 7, 8, 15, 20.
Adobe building, 178.
Adoption, 89.
Aleurites vernicia, 139, 178, 251, 286, 293, 303.
Amphitheatres, 252, 257.
Animals, 210.
Asses, 287.

Banyan, 205.
Barrenness, 77, 124, 126, 148, 156, 163.
Behaviour, good, 59, 69, 81, 206, 258.
Behaviour, bad, 211-12.
Behaviour, indifferent, 112, 136, 144, 181, 200, 258.
Berries, 205, 253, 303.
Birds, 233.
Birds, scarcity of, 66, 154, 198, 212, 233, 256, 297.
Birds, numerous, 86, 99, 265.
Blacksmiths, 135.
Blakiston's narrative, 21, 113.
Blasting, 265.
Boats, official, 16.
Boats, rig of, 2.
Boats, red, 4, 15, 277.
Boats, elastic, 264.
Boat-gear, 18, 23, 150, 266.
Brakes, 226.
Brick tea, 211.
Bridges, 133, 149, 171, 185, 249, 250, 255, 257, 294, 296.
Brine, use of, 224.
Buckwheat, 295.
Buffaloes, 172, 209, 225.
Buffers, junk, 150.
Building, 155.
Burial ground, 16.

Camphor-wood, 264.
Candles, 253.
Carriers' load, 222.
Carriers' baskets, 258.
Cattle, 144-5, 255.
Cauls of pigs, 94.
Cave-dwellings, 60, 85, 111, 166, 176, 200, 204, 231, 257.
Cement, manufacture, 6, 180.
Chair coolies, 246, 279, 283.
Chang Hsien-tsung, 7, 96, 175, 184.
Charcoal, 145, 258, 266.
Chêng-an city, 136.
Cherries, 248, 256.
Chinese names for boat gear, 23.
Christians, 286.
Chungking, trade of, 74.
Chungking, size of, 124-5, 204.
Chungking, history of, 201-3.
Clans, 284, 292, 297.
Climate, 201.
Clothes, value of, 133.
Coal, consumption of, 183.
Coal, 16, 33, 69, 88, 95, 103, 106, 109, 125, 139, 181, 189, 191, 195, 247, 256.
Coal marts, 53, 55, 169, 182.
Coal, prices of, 182, 183, 231, 245, 247, 258, 263, 269, 278.
Coal, mines, ventilation of, 192, 245.

Coal, anthracite, 263.
Coal, soft, 263.
Cocoons, use for old, 85-6.
Coffins, cementing, 114.
Coke, 183, 269, (see charcoal).
Collision spars, 12.
Coracles, 264.
Cormorants, 233, 270.
Cost of living, 134, 145, 191, 230, 288.
Cotton, 63, 68, 97, 296.
Cotton imports, 63, 64.
Cotton goods, foreign, 258.
Criminals, 148.
Crops, 300.
Cuckoo, 53, 95, 212.
Cultivation, all in patches, 254.
Cupboards, 151.
Current, rate of, 12, 157.

Dam, 228.
Deer, 297.
Dialects 7, 19, 70, 200, 258.
Dirt, 137.
Distances, vagueness of, 140.
Dogs, 196.
Dress, 13.
Drugs, 126, 285.
Duck rearing, 256.
Dyes, 123.
Dysentery, cure for, 251.

Eleococca verrucosa, 6, 142, (see *Aleurites*), 178.
Elevation, 288.
Executions, 152.
Extortion, 135, 151-2.

Fairs, 86, 89, 125, 207, 246.
Fall of water, 162.
Family-names, 284.
Fans, bamboo, 98; rush, 214.
Feet, squeezed, 84, 154, 249, 249, 294.
Feet, unsqueezed, 90.
Feet, in process of squeezing, 287.
Female labour, 135, 288.
Female respectability, 288-90.
Ferns, edible, 121.
Fig-tree, 205.
Fire-damp, 192.
Fishing, 252, 270-1.
Flails, 208.
Floods, 190, 198.
Flowers, 208.
Flowers, artificial, 248.
Fog, 246.
Food, natives', 145.
Food, pigs', 253.
Food, buffaloes', 225.
Foreign goods, absence of, 138.
Fortresses, hill, 187, 198, 257, 271.
Foxes, 82.
French missionaries, 147, 181, 193.
Fruit trees, 256, 285.
Fu Chou city, 170.
Fuel, 260, 266, 270.
Fu-shun City, 230-1.
Fu-shun River, 232.
Future life, ideas of, 114-5.

Gelder of pigs, 59.
Ghosts, 205.
Gill's narrative, 21, 174, 216.
Gleditschia sinensis, 122.
Goats, 262.
Gorge, Ichang, 5; Lukan, 9; Mi-tan, 12.
Gorge, Kung-t'an River, 157, 161, 169.
Gorge, Hoh Chou River, 191, 192.
Gorge, Sung-k'an River, 265.
Grass cloths, 117.
Grass fuel, 70.
Grass plant, 119.
Grinding grain, 259.
Gruel, 101.
Gypsum, 231.
Gypsum, uses of, 216.

Hakkas, 7, 296.
Harrows, 213-4.
Hatching silkworms, 94.
Hawsers, bamboo, 3, 8, 22.
Height, 288.
Hemp, 85, 118, 119.
Hemp, cultivation of, 118, 217, 259.
Hoh Chou city, 57, 175, 199.
Ho-kiang city, 238.
Honesty, 139.
Honey, 138, 293.
Hot springs, 193.
Houses, style of, 81, 200, 294.
Hung-ch'uan, 4.

Hwang-kwo tree, 250.
Hydrophobia, 135.

Ichang, 1, 301.
Impressing boats, 236.
Indigo, 108, 210.
Infanticide, 99.
Ink, 135, 179.
Inns, 137, 141, 172, 207, 216, 235, 249, 26 , 281, 286-8, 290, 297.
Insects, destructive, 269.
Iron, 95, 106, 128, 231, 247-8.
Iron works, 128, 260, 266.
Irrigating machines, 84, 123, 212, 213.

Jaundice, cure for, 126.
Jên-hwai River and District, 239.
Jung-ch'ang city, 213-4.
Junks, 158, 177, 188-9, 228, 269.
Junks, cost of, 158.
Junks, speed of, 114, 158, 167.
Junks, crooked-sterned, 158.
Justice, 148, 151-2.
Jute, 132.

Kan-shui town, 259.
Kia-ling River, 174.
Kiang-k'ou town, 166, 244.
Kiang-péh city, 112, 174.
Kiang-tsing, or Kiang-tsze, 244.
Kien-shih city, 290
K'ien Kiang River, 157.
K'i-kiang River, 239 269.
K'i-kiang District, 253, 256.
Kin Shan Mountain, 128.
K'ü Ho River, 176, 209.
Kung-t'an River, 156.
Kung-tsing, 227.
K'wa-tsz Ch'uan (boat), 2.
Kwang-an city, 109.
Kwei Chou Province, 241, 259.
Kwei Chou city, 13.
K'wei-chou Fu, 13, 280.
K'wei Kwan, 13.

Labour, female, 80.
Lamps, safety, 192.
Lamp-wick grass, 98, 107, 248.
Lamp-oil, 253.
Land measurements, 115, 189.
Land, profits on, 108.
Land-tax, 88, 135, 249, 253, 256.
Land-tax, collection, 107, 129, 261.
Leases of land, 89-90, 102-3, 115, 189.
Leopards, 82, 252, 297.
Lepers, 297.
Licenses, 267.
Life-boats, 4 15, 277.
Lime, 191, 193.
Lime-kilns, 245.
Limestone, 149.
Limestone Pass, 271.
Liminfoo, 174.
Lin-shui city, 111.
Liquorice 252.
Literati, 254-5.
Li In-ch'êng, the rebel, 184.
Living, cost of, 230, (see Cost of living).
Love-songs, 296.
Lu Chou, 235.
Lu Chou, old city, 237.
Lukan, gorge of, 9.
Lung-ch'ang city, 217.

Madness, cure for, 122.
Magic lantern 106.
Maize, 136, 293.
Manners, Chinese, 255.
Man-tsz Tung, 60, 85, 111, 166, 176, 200, 204, 231, 257.
Manure, 116, 179, 248.
Map of route, 7.
Maps, errors of, 124, 146.
Marines, 8, 15.
Marionettes, 104, 106.
Marriages, 89.
Measures, 240-1, 245, 246.
Medicines 216, (see Drugs).
Miao-tsz, 166, 261, 264, 296.
Mills, (see Oil, Sugar).
Mill races, 143.
Mill stones, 195.
Min Kiang River, 174.
Mole building, 105.
Monuments, 205, 211.
Mosquitoes, 91.
Mosquitoes, remedy for, 59.
Mulberry trees, 61, 93, 103, 121, 154.
Mules, 287.
Music, 209.

Mussulmans, 85.
Mu-tung, port and sub-district, 113, 173.

Names of places, 27.
Names of boat-gear, 23.
Names of families, 284.
Nan-chin, 5.
Nan-ch'uan city, 124.
Nan-ch'uan city, faults of maps, 123, 124, 253.
Nautical phrases, 23.
Navigation of rivers, 76.
Newspapers, 235.

Oaks, 93, 101, 145, 147, 254, 300, 303.
Oaks, silkworm, 130, 135, 154, 259, 266.
Official protection, 275, 280.
Oil, *t'ung*, 6, 130, 131, 139, 178, 179.
Oil, rape, 113.
Oil, vegetable, 253.
Oilcake, 179, 192.
Oil-factory, 180.
Olives, 239.
Opium cultivation, 171, 206, 247, 254.
Opium, 77, 83, 88, 103, 109, 124, 132, 136, 145, 147, 158, 164, 170, 172 207, 247, 258-9, 295.
Opium, Shen Si, 74.
Opium, Kwei Chou, 153.
Opium trade, 17 ', 209.
Opium interest, 294.
Opium taxation, 294.
Oranges, 244, 252, 256, 269, 271, 295.
Otter fishing, 271.

Pa Hien City, 174.
Pans, iron, 106, 231, 236, 260, 270-1.
Panthers, 297.
Pao-ning city, 96.
Paper, 121, 129, 134, 194, 251.
Paper, writing, 107.
Paper factory, 129, 193.
Parricide cases, 237.
Parsnips, 107.
Pa-tung city, 294-5.
Pa-tung city, 294-5.
Pea-nuts, 63.
P'êng Chou city, 102.
P'êng Shui city, 164.
Persimmons, 295.
Pigs, 214.
Pigs' cauls, use for, 94.
Pigs' shoes, 117.
Pigs' food, 21'.
Pigs' bristles as manure, 248.
Pigs' dead, eaten as food, 286.
Pilots, 167, 168.
P'ing-shan Pa, 5.
Pipes, 143.
Plants, 304-8.
Ploughs, 150, 213.
Poisonous plants, 122, 252.
Poles, before houses, 151.
Police, absence of, 153.
Polygonum, 303.
Poppy, (see Opium), uses of, 206, 247.
Population, 70, 135, 139, 154.
Popular characteristics, 294, 297, 299.
Portals, 205, 211.
Potash, 120, 178.
Potatoes, 288.
Potteries, 55, 120, 214.
Priests, Buddhist, 184.
Priests, French, 147, 181.
Proverbs, 91.
Public spirit, 171.
Pulse, 122, 149, 210.
Puns, 198.

Quarrying, 250.
Querns, 209.

Rabbits, 196.
Rape, 208.
Rapids, Siao-lu Chio and Ta-lu Chio, 7; Kwa Dung, 8.
Rapids, Hsin or Ch'ing-t'an, 10, 20; Yeh T'an, 16.
Rapids, Kung-t'an River, 157, 161, 162, 165; Yang-kwo-ch'i, 167.
Rapids, Hoh Chou River, 190.
Rapids, Native opinion on, 20.
Rapids, Fushun River, 233.
Rapids, Upper Yangtsze, 238, 243, 276.
Rapids, K'i-kiang River, 267-8.

Rebels, 7, 96, 175, 184-5, 198, 257.
Rebellion, Great Sz-ch'uan, 185.
Reservoirs, 85, 116.
Resin, 114.
Respectability, 288-293.
Rice, 165, 250.
Rice, cultivation, 55, 115, 300.
Rice, consumption, 190.
Rice, hulling of, 250, 259.
Rice, prices of, 165.
Richness of land, 206.
Rig of boats, 3, 159.
River, Upper Yangtsze, 241-3.
Rivers, unnavigable, 243.
River, T'ung-ch'uan, 76.
River Fushun, K'i-kiang, &c. (See under those names. &c.)
Roads, 250, 299, 294-5.
Rocks, 121, 149, 169.
Rollers, friction, 14.
Ropes, 266.
Rubus, or 'berry,' 303.

Saffron, 101.
Saffron trade, 66, 103.
Sails, up and down rapids, 22.
Salt, consumption of, 69, 160, 260, 287, 292.
Salt, production of, 71, 81, 177, 194.
Salt wells, 72, 75, 83, 88, 100, 204, 221, 292.
Salt warehouses, 113, 170.
Salt, prices of, 130, 146, 164, 209, 218, 265, 269, 292.
Salt revenue, 195.
Salt tax, 196.
Salt boiling, 222.
Salt pan, 255, 265.
Saltpetre, 241.
Sandstone, 121, 149, 169.
Scenery, 110, 141, 209.
Scenery, characteristics, 252, 257, 269.
Schools, 90, 139.
Sculpture, 171, 197.
Shan-tow-pien, 8.
Shao-Shên-fu, 3.
Sheepskins, 13.
Shih Ta-k'ai, the rebel, 198.
Shipbuilding, 57, 199.
Shirtings, native, 97, 106.
Shoes, for pigs, and cows, 117.
Shoes, straw, 120, 131, 154.
Shrines, 144.
Shun-k'ing city, 104; river, 200.
Si-ch'ung city, 102.
Silk, 61, 76, 77, 83, 130, 136, 256, 262.
Silk machines, 78, 83.
Silk dealers, 91.
Silk, qualities of, 91-2, 95.
Silk, prices, 95.
Silk, wild, 262.
Silkworms, 130, 154.
Silkworm hatching, 94, 137.
Silkworm oak, 93, 130, 135, 136, 154, 259, 262.
Singing, 296.
Snow, 128
Sophora Japonica, 123.
Sorghum, 206.
Spinning, 98, 106, 107, 123, 207.
Stages, or *t'ang*, 56.
Steamers, in the gorges, 6, 17; in the rapids, 12, 14, 17.
Sterculia, 303.
Stockades, hill, 187, 198.
Sugar manufacture, 186.
Sui-ning city, 69.
Sulphur, 126, 241.
Sung-ch'i town, 242-3.
Sung-k'an town, 265.
Sunrise, 293.
Superstitions, 140.
Sweeps, (boat), 11, 22, 160, 266, 270.

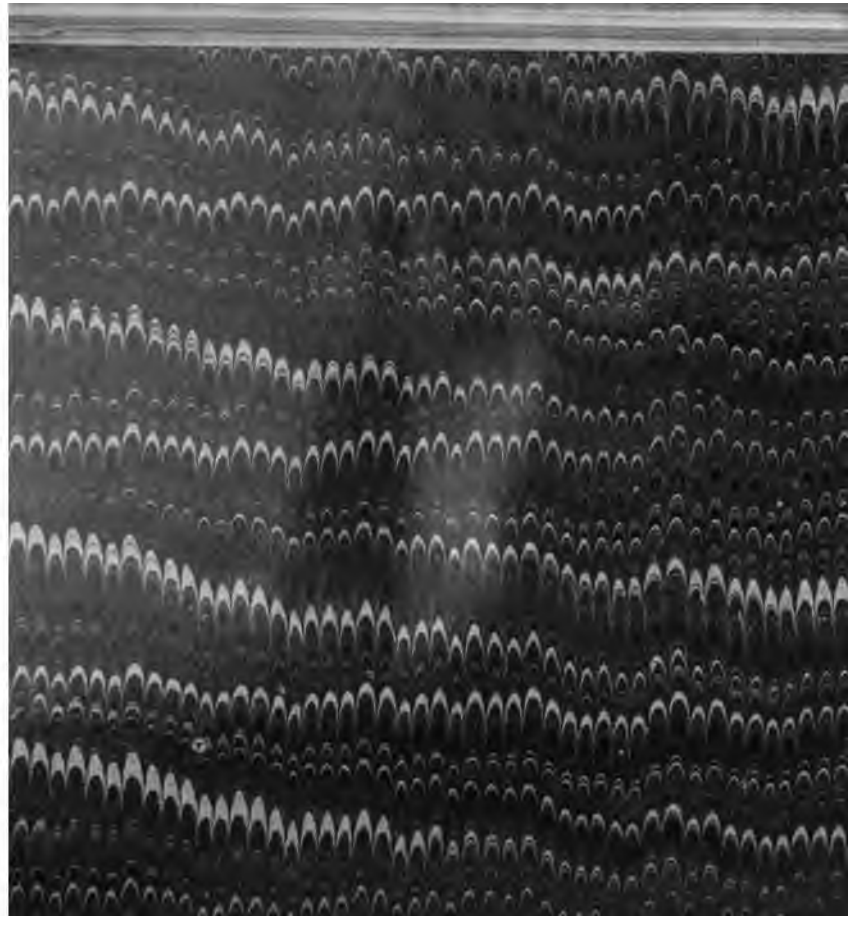
Ta-k'wan, the term, 7.
T'ai-ho Mart, 73.
Tallow tree, 253, 288, 303.
Taotai, northern, 97.
Taotai, central, 236.
Taotai, western, 236.
Taro, 62.
Taro, astringent, 239.
Taxes, 195.
Taxes, land, (see Land-tax).
Tea, 113, 124-5, 164, 251.
Tea, trees, 121, 251.
Teak, 149, 156.
Temperature, 120, 151, 201.
Temples, 187, 197.
Threshing, 144.
Tigers, 252.

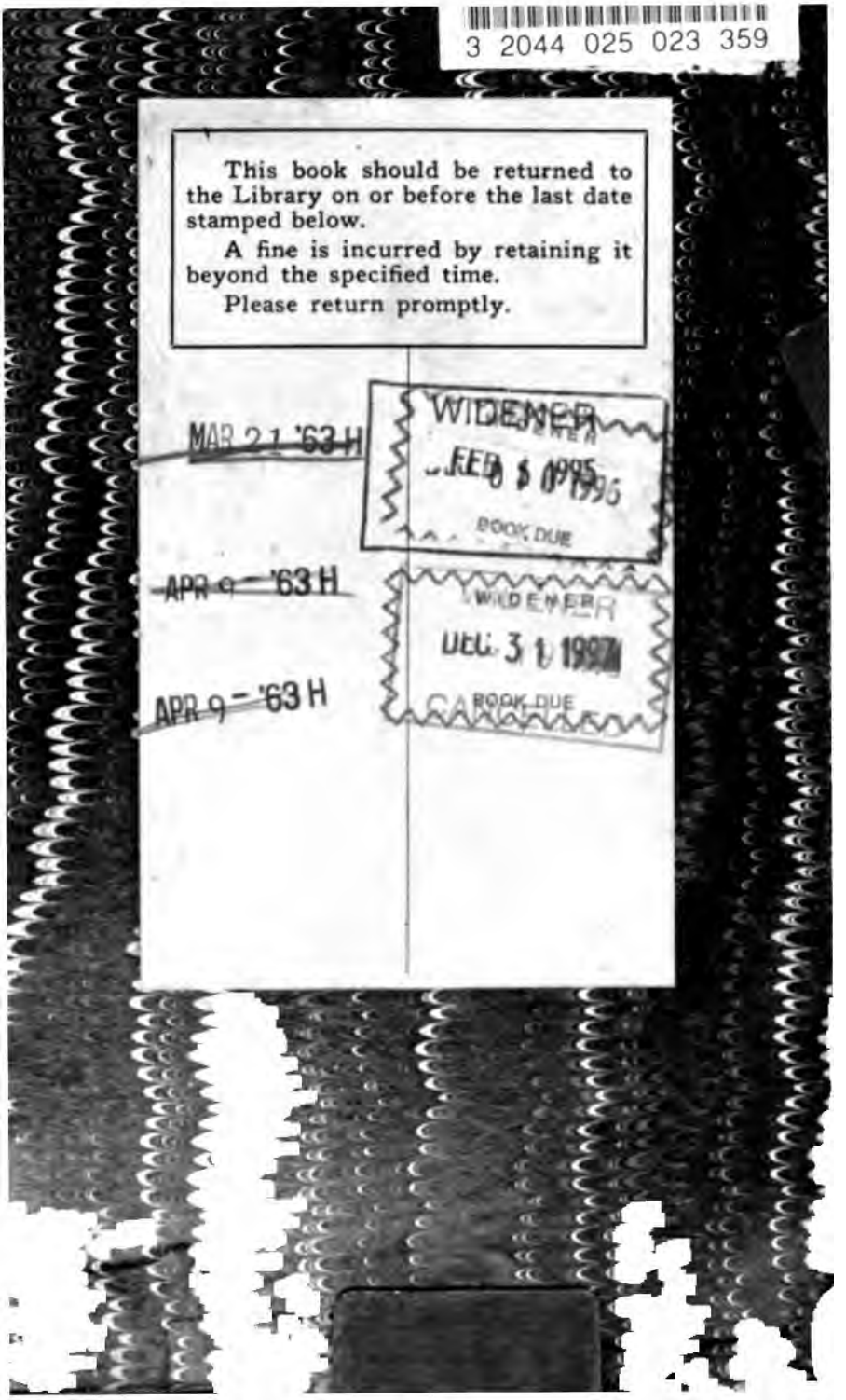
Tillage, incessant, 68.
Timber, 117, 131, 199.
Timber, prices of, 199.
Tobacco, 57, 58, 95, 97, 108, 241.
Tobacco, cultivation, 57, 62, 241.
Tobacco, water-pipe, 102.
Torrents, 282.
Torture, 152.
Trackers, 7, 9, 18, 160.
Trackers, pay of, 18.
Trade, 199, (see Salt, Cotton, Silk, Opium, &c.)
Traveller's *Vade Mecum*, 4, 9, 20.
Travelling boats, Hiring, 1, 236, 268, 275.
Tsz-liu Ching, 221.
Tsz-t'ung District, 253.
T'ung-ch'uan city, 77.

Varnish, 122, 179, 291.
Varnish trees, 129, 142, 154.
Vermin, 87, 172, 198.
Villages, 173.
Vines, 210.

Wages, 134.
Walls of cities, 239.
Water buffaloes, 172, 209, 225.
Water conduits, 121, 124.
Water storage, 85, 116.
Water-wheels 124, 143.
Wax-tree, 68, 97, 142.
Weaving, 123, 207.
Weights and measures, 182.
Wells, Salt, (see salt wells).
Wên-ch'ang District, 253.
Wheat, 107, 132, 136, 206.
Wheat, price of, 107.
Whirlpools, 288, 276.
Widows, 249.
Windlass, 226.
Winds, in gorges, 6, 263.
Winds, in mountains, 287.
Wine, 170, 219-20, 242.
Wizards, 144.
Women, 249-50, 294.
Women, sale of, 99.
Women landlords, 288.
Wood, for bows, 122, (see timber).
Wu-lung city, 166.
Wrecks, 14, 192.
Wu-ch'uan city, 145-6.

Yams, 101.
Yang-tsz, 301.
Yang-tsz, depth of, 15.
Yang-tsz, flooding of, 7.
Yang-tsz rise of, 14.
Yarn, 210.
Yen-t'ing city, 82.
Yoh-ch'ih city, 107.
Yün Nan, meaning of, 246.
Yung-ch'uan city, 221.

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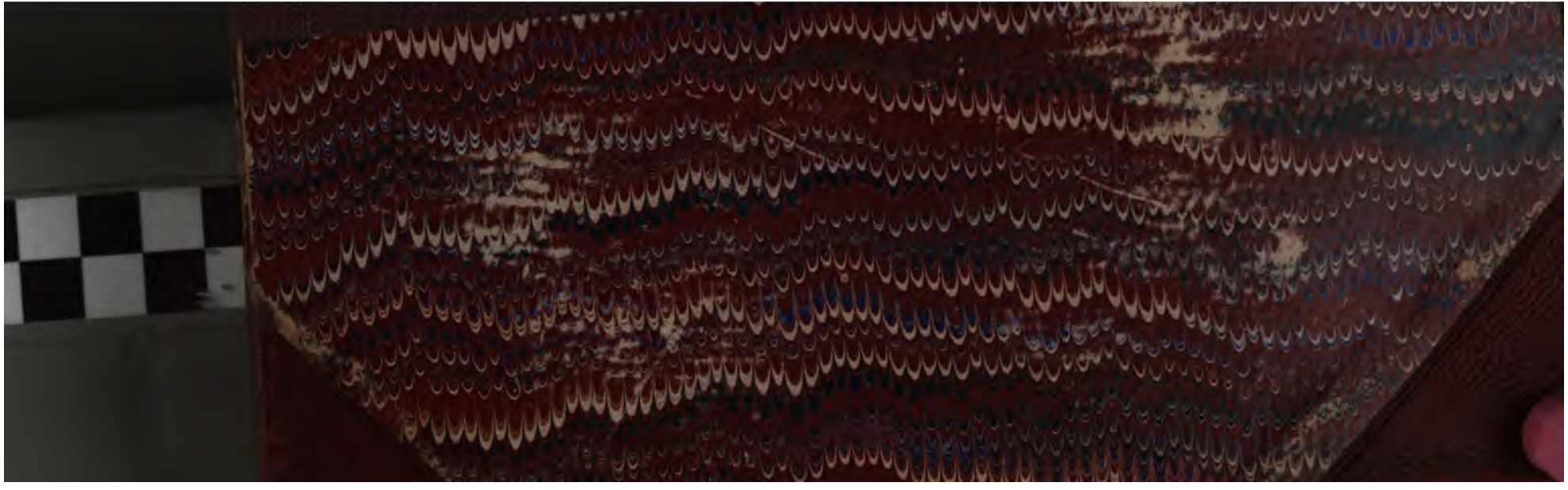
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